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ROYAL COMMISSION<sup>TM</sup>  
ON  
LABOUR IN INDIA.  

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EVIDENCE.  

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Vol. III.—Part 1.

CENTRAL PROVINCES and UNITED  
PROVINCES.

WRITTEN EVIDENCE.

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1930.



### NOTE TO PART I.

In this part is reproduced the bulk of the evidence submitted to the Commission in the form of written memoranda in reply to the questions of subjects circulated in August 1929. In preparing this volume the Commission have sought to retain all matter likely to be of permanent interest to students of the subject, and not available elsewhere. Material supplied to the Commission which has already been printed and published elsewhere has in general not been reproduced. Where "memoranda" have been abridged all considerable omissions have been indicated in the text.



## TERMS OF REFERENCE.

“ To inquire into and report on the existing conditions of labour in industrial undertakings and plantations in British India, on the health, efficiency and standard of living of the workers, and on the relations between employers and employed, and to make recommendations.”

NOTE.—“ Industrial undertaking ” for the purpose of the Commission is interpreted as in Article I of the Washington Hours Convention, which is as follows :—

“ For the purpose of this Convention, the term ‘ industrial undertaking ’ includes particularly :—

- “ (a) Mines, quarries, and other works for the extraction of minerals from the earth.
- “ (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed : including shipbuilding and the generation, transformation and transmission of electricity or motive power of any kind.
- “ (c) Construction, reconstruction, maintenance, repair, alteration, or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gaswork, waterwork or other work of construction, as well as the preparation for or laying the foundations of any such work or structure.
- “ (d) Transport of passengers or goods by road, rail, sea, or inland waterway, including the handling of goods at docks, quays, wharves or warehouses, but excluding transport by hand.”

\* \* \* \* \*

The competent authority in each country shall define the line of division which separates industry from commerce and agriculture.

M15RCL

LIST OF SUBJECTS.

**I. Recruitment.**

- (1) *Origin of Labour.*
  - (i) Extent of migration.
  - (ii) Causes of particular streams of migration.
  - (iii) Changes in recent years.
- (2) *Contact with villages.*
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  - (ii) Extent of permanent labour force.
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  - (v) Possible substitutes.
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    - (c) Other causes.
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  - (iv) Unemployment Insurance.
  - (v) Application of International Conventions relating to unemployment.
- (8) *Labour "turnover."\**
  - (i) Average duration of employment.
  - (ii) Extent of casual employment.
  - (iii) Absenteeism.
    - (a) Extent, character and causes.
    - (b) Seasonal or otherwise.
    - (c) Time and wages lost.
- (9) *Apprentices Act, 1850.*
  - Value of.

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\* This word should be read as indicating generally the changes in composition of the labour staff of an undertaking.

## **H. Staff Organisation.**

- (10) *Details of organisation, administrative and departmental.*
- (11) *Selection of managing staff.*
- (12) *Recruitment and training of supervising staff, superior and subordinate.*
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  - (iv) Effects.

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  - (iii) By private landlords.
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- (17) *Facilities for acquisition of land for workers' houses.*
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- (iii) Working conditions—
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  - (i) Normal, i.e. as determined by custom or agreement.
  - (ii) Actual, i.e. including overtime.
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- (57) *Effect of 60 hours restriction—*
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  - (ii) Suitability of the law.
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- (63) *Hours worked per day and per week.*
  - (i) Normal, i.e. as determined by custom or agreement.
  - (ii) Actual, i.e. including overtime.
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  - (ii) Actual, i.e. including overtime.
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45	Lt.-Col. L. C. Larmour, I.A.	Superintendent, Harness and Saddlery Factory, Cawnpore.	241—248	125—134, C.-1783.
46	Lt.-Col. C. L. Dunn, C.I.E., D.P.H., I.M.S.	Director of Public Health, United Provinces.	205—210	} 135—155, C.-1913.
47	Dr. Trivedi ..	Municipal Health Officer, Cawnpore.	..	
48	Mr. J. M. Lownie ..	Vice-President of the Upper India Chamber of Commerce and Director of Messrs. Begg, Sutherland and Co., Ltd. (for the Sugar Industry).		
49	Mr. H. A. Wilkinson	Director, Messrs. Begg, Sutherland and Co. Ltd. (for the Cotton Industry).		
50	Mr. W. R. Watt, M.A., B.Sc., D.I.C., F.G.S.	of the British India Corporation, Ltd., Cawnpore (for the Woollen Industry).	249—263	156—180, C.-2174.
51	Mr. A. C. Inskip, O.B.E.	of the British India Corporation, Ltd., Cawnpore (for the Leather Industry).		
52	Mr. C. H. Mattison ..	of the British India Corporation, Ltd., Welfare Department, Cawnpore.		
53	Mr. J. G. Ryan, M.B.E., V.D.	Secretary, Upper India Chamber of Commerce, Cawnpore.		
54	Mr. J. C. Donaldson, M.C., I.C.S.	Deputy Secretary to the Government of the United Provinces, Department of Industries.	132-205	181—220, C.-2506.

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		II. UNITED PROVINCES— <i>contd.</i>		
55	Mr. W. G. Mackay, M.B.E.	Chief Inspector of Factories, United Provinces.	225—238	181—220, C.-2506.
56	Mr. S. P. Shah, I.C.S.	Director of Industries, United Provinces.	132—205	
57	Mr. G. M. Harper, I.C.S.	Collector of Gorakhpur. . .	240—241	
58	Dr. Radha Kamal Mukerjee, M.A., Ph. D.	Professor and Head of the Department of Economics and Sociology, Lucknow University.	263—280	221—230, C.-3052.
59	Mr. J. P. Srivastava, M.L.C.	Chairman, Improvement Trust, Cawnpore.	280—290	231—241, C.-3187.
60	Rev. C. H. Mattison	Trustee, Improvement Trust Cawnpore.		
61	Mr. A. Ronald Price, M. Inst., M. and Cg. E.	Chief Engineer, Improvement Trust, Cawnpore.		
62	Achchha Singh with others.	Representatives of the Harness and Saddlery Factory Labour Union, Cawnpore.	290—291	242—247, C.-3349.
63	Mr. Ghasita ..	Representatives of workers in the textile mills, Cawnpore.	291	248—250, C.-3433.
64	Mr. Munir ..			
65	Mr. F. Anderson, C.I.E., I.S.E.	Superintending Engineer, Irrigation Works, United Provinces.	210—214	
66	Mr. D. W. Crighton	Superintendent, Government Press, United Provinces.	214—221	
67	Mr. R. G. D. Walton, I.C.S.	Collector of Cawnpore, Commissioner for Workmen's Compensation.	222—225	
68	Rai Bahadur Brij Lal, B.A.	Director of Land Records, United Provinces.	238—240	
69	Mr. A. P. Dube, Bar-at-Law.	President, Press Employees' Union, Allahabad.	292—294	
70	Mr. Babu Lal ..	Khurja (U. P.) ..	294—295	
71	Superintendent of Manufacture, Clothing Factory.	Shahjahanpur. . .	295—303	

The evidence of Mr. R. W. Fulay, Honorary Secretary, Press Employees' Association, etc., Mr. J. S. Pahade, Secretary, R. M. S. Union, Nagpur and Mr. S. P. Deshpande, Vice-President, Motor Drivers' Association, Nagpur, is contained in the pamphlet 'Labour Conditions in the Central Provinces and Berar' published by T. Krishnaswamy Mudiraj and Daji Shashtri Chandekar, Walter Road, Nagpur City, Price Rs. 3.

The evidence (written or oral or both) of the following witnesses belonging to this Province is printed in Volume VIII, parts I (written) and II (oral)—Railways :—

Serial No.	Name.	Designation and/or address of witness.	Vol. VIII, Part I (Written evidence) Pages.	Vol. VIII, Part II (Oral evidence) pages and Nos. of the first questions of the series.
1	Mr. Surendra Nath, M.A., LL.B.	Acting President.	461—477	373—388, K.-3570.
2	Mr. Hikmatullah, Bar-at-Law.	Chief Legal Adviser.		
3	Mr. H. S. Bhatnagar	General Secretary. . .		
4	Mr. K. N. Pandey . .	Asst. Station Master.		
		Representatives of the East Indian Railway Union, Moradabad.		
5	General Secretary, East Indian Railway Employees' Union.	Lucknow. . . . .	486—488	..
6	Bengal and North-Western Railway-men's Association.	Gorakhpur. . . . .	497- 509	..



# GOVERNMENT OF THE CENTRAL PROVINCES AND BERAR.

## Introductory.

For the purposes of this memorandum industrial undertakings in the Central Provinces and Berar may be roughly divided into five classes :—

	Number of industrial establishments.	Average number of operatives employed daily.
(i).—Cotton ginning and pressing factories in the cotton tract of the province (the four Berar districts, the Central Provinces districts of Wardha, Nagpur, Nimar, and Chhindwara).	613	39,500
(ii).—Cotton spinning and weaving mills in the towns of Akola, Ellichpur, Badnera, Hinganghat, Pulgaon, Burhanpur, Nagpur and Jubbulpore.	15	19,500
(iii).—Mines mainly manganese (in the districts of Balaghat, Bhandara, Nagpur) and coal (in the Chanda and Chhindwara districts), but including a few limestone and other quarries.	260	38,300
(iv).—Other minor industries to which the Factories Act apply :—	121	12,200
Operatives.		
(a) Factories owned by the Government or local bodies (11).	3,000	
(b) Rice mills (seasonal) (33) .. .. .	1,180	
(c) Engineering (18) .. .. .	1,500	
(d) Food, drink and tobacco (11) .. .. .	1,500	
(e) Chemicals, dyes, etc. (33) .. .. .	1,750	
(f) Processes relating to stone, wood and glass (11)	3,250	
Total ..	12,180	
(v).—Other industrial establishments, to which the Factories Act does not apply ( <i>bidi</i> or tobacco factories, lac factories, etc.).	850	30,000
Total ..	—	139,480

A rough map\* is appended indicating the areas of the province under the three principal crops of cotton, wheat and rice and the principal industrial undertakings in the province. The cotton area covers the four Berar districts, the Central Provinces districts of Nimar, Wardha, Nagpur and portions of the Chanda, Hoshangabad and Chhindwara districts. All the ginning and pressing factories belong to this area and as also 14 out of the 15 cotton mills, the fifteenth mill being at Jubbulpore. It should be noted that the concern known as the Empress Mills at Nagpur consists of five separate mills. (One cotton mill in the Rajnandgaon Feudatory State in Chhattisgarh, employing about 4,000 operatives daily, is excluded from the scope of this memorandum as the local government has no control over it.) The important manganese mines lie in a strip of country falling in the Nagpur, Bhandara and Balaghat districts; and the important coal mines are situated in the Chhindwara and Chanda districts. Of the important minor industries, to which the Factories Act apply, the cement and pottery works are found in the Jubbulpore district, the seasonal rice mills are mostly in Bhandara and the Raipur and Bilaspur districts of the Chhattisgarh Division, while the remainder are scattered over the province. The most important unorganized industries, to which the Factories Act has not been extended, are *bidi*, shellac and myrobalan factories, of which a number are found in the town of Gondia, on the Bengal-Nagpur Railway in the Bhandara district; while the others are scattered over the province.

\* Not reproduced.



The first cotton mill established in the province was No. 1 Mill of the Empress mills, established at Nagpur, in 1877, and by 1900 the number of such mills had increased to 7. Nine Mills have been added during the first quarter of the present century. The number of workers employed per diem in these mills is as follows :—

1913	..	..	..	12,981
1923	..	..	..	17,630
1928	..	..	..	19,389

The progress of the growth of the cotton ginning and pressing factories is shown in the statement below :—

Year.					Number of factories.	Number of workers employed daily.
1903	..	..	..	..	108	Not known.
1913	..	..	..	..	454	30,800
1923	..	..	..	..	519	38,651
1928	..	..	..	..	613	39,351

but the increase in the number of registered factories is due to the extension of the definition of factory by the Factory Acts of 1911 and 1922, as well as to the industrial development of the province.

The first prospecting license for manganese was granted in 1899 ; and the growth of this industry has therefore been confined to the present century. The Mohpani coalfield (in Narsinghpur district) opened in 1862, and the Warora coalfield (in Chanda) opened in 1873, have now been closed down. The Ghugus coalmine in Chanda which was opened in 1870, is still working ; all other coalfields started working during the last 20 years. The number of manganese and coal mines now working is approximately 30 and 190. Out of these, the most important manganese mines are the property of some half a dozen companies and proprietors, while the bulk of the coal industry is in the hands of four companies. The other mines are very small and do not employ labour on a large scale. It may be noted that the Central Provinces mines are responsible for nearly 87 per cent. of the manganese produced in India. The coal mines increased from five (employing 3,024 persons) in 1911, to 17 (employing 9,580 persons) in 1921, while the manganese mines increased by only two, totalling 42, during the decade ending 1921. The increase in the number of the coal mines was due to the war boom. The Central Provinces mines produce only 700,000 tons or  $3\frac{1}{4}$  per cent. of the total annual output of 22,000,000 tons of Indian coal. The cement and pottery works were established between the years 1901 and 1923. Of the unorganized undertakings, *bidi*-making establishments grew from six (employing 379 persons) in 1911 to 133 (employing 6,440 persons) in 1921 and to-day about 775 employing some 29,000 workers.

The condition of the 139,500 workers, employed in the five main classes of industries, specified above, thus falls within the scope of this enquiry. Out of the above undertakings, the mines are administered under the Indian Mines Act by the Chief Inspector of Mines from whose annual reports most of the information now given is taken. To this is added such information as it had been found possible to collect for this report, regarding the recruitment, housing, health and wages of labour in mines. The Indian Factories Act applies to undertakings employing altogether about 70,000 operatives, and it is only with regard to these that accuracy can be claimed for the information collected. As the Indian Factories Act has not been applied to unorganized industries, the information available is meagre. It should be noted that the cotton ginning and pressing factories are seasonal and usually work for not more than six months in the year from November to April. Similarly, the rice mills, employing about 1,177 workers, are in operation for 8 months in the year from November to June. The most important of the minor industrial establishments are the three cement factories in the Katni tahsil of the Jubbulpore district, employing 1,850 operatives, the two pottery works at Jubbulpore, employing 1,110, the Government Gun Carriage Factory at the same place employing 2,426, and 25 oil mills, employing 715 operatives.

The principal industries of the province, employing labour on a large scale (with 97,300 workers or about 70 per cent. of the total labour falling within the scope of the enquiry), are thus the cotton industry and manganese and coal mining. It is the condition of the labour in these industries, specially that of the labour in the cotton industry (with 69,000 operatives or 50 per cent. of the total labour force) that has been the basis of the brief survey of labour conditions set forth in this report. The condition of labour in the cement, pottery, Gun Carriage Factory and oil mills (employing about 6,220 workers or 4.5 per cent of the total) has been the basis of the survey of labour conditions in the minor industries of the province.

The information that it has been found possible to obtain in answer to the various questions of the questionnaire is given separately for each of the five main classes of industrial undertakings.

The existing records do not yield complete information regarding the various matters under enquiry. The only systematic reply to the questionnaire has been received from the Empress mills, Nagpur, the premier mills of the province, and from one or two mining firms. The former is based on reliable statistical information accumulated by the authorities of the mills by a careful study of the changing conditions in their works during several decades. A copy of this report, which is as thorough as existing statistical information makes it possible to be, is being sent by the mills direct to the Secretary of the Labour Commission. No extensive quotations therefrom have therefore been made in the present report, but it should be emphasized that the Empress mills report deserves the most careful study. The condition of labour in these mills is, however, more advanced than those of other mills and should not be taken as typical of conditions prevailing in other industries in the province.

As railways are a central subject, labour conditions on railways have been excluded from the scope of this report, which is confined to matters with which this province is concerned and on which information is available.

### I.—Recruitment.

1. In the seasonal cotton factories, the bulk of the labour comes from the surrounding villages, while even in perennial factories a considerable portion of the labour force is recruited from the same source. In large industrial centres like Nagpur and Jubbulpore there is also a considerable labour population permanently settled in the towns. The only estimate it is possible to make of the percentage of local labour to the total at some of the industrial centres is given below.

(i) The movement of industrial labour follows the same lines as that of the general immigrant population, since an appreciable portion of the total migration is caused by the demands of industries. The main labour-recruiting grounds for this province are :—

(a) In the north the Bundelkhand and Rewah States, which supply the hereditary earth workers, Kols, for the mining industry as well as high caste unskilled recruits for the mills. Trained or semi-skilled labour from various parts of the United Provinces mingle with this stream, as temporary unemployment or the disappearance of hereditary occupation induces them to seek employment and higher wages elsewhere.

(b) In the south-east, Mahars, Gonds and Chamars are recruited from Bhandara and the Chhattisgarh districts, as well as from the Indian States of Chhattisgarh.

(c) In the south a number of Telegu castes (known as Telingas) come from His Exalted Highness the Nizam's dominions and the Sironcha tahsil (Chanda district) mainly for employment in the Chanda coal mines.

(d) In the south-west, several districts of the Bombay Presidency (mainly Ahmednagar, Poona and Sholapur districts) supply a certain amount of specialized labour mostly for the seasonal cotton factories of Berar.

Stream (a) is particularly strong in the northern districts and Berar, supplying the cement factories and potteries, the seasonal cotton factories of the Hoshangabad and Nimar districts, the textile mills of Berar, as well as the mining areas in the northern and eastern parts of the province.

Stream (b), which was the strongest until the scarcity in the northern districts and Central India in recent years, is still one of the main sources of labour supply in the province, specially for the manganese mines and textile mills of Nagpur and Akola.

Stream (c) and stream (d) are much weaker, and the former is mainly restricted to coal mines and seasonal factories in the south, while the latter distributes itself over the cotton tract of the province (the Maratha Plain division).

The approximate distribution of local and immigrant labour in the cotton industries at the following centres is given in the table below :—

	Stream (a).	Stream (b).	Stream (c).	Stream (d).	Local.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Jubbulpore .. ..	10	—	—	—	90
Nagpur .. ..	6	10	2	2	80
Hinganghat .. ..	4	2	6	3	85
Amraoti .. ..	20	*8	2	5	65
Akola .. ..	25	*30	—	15	30

\*Includes workers from Bhandara, Nagpur and the neighbourhood.

In the decade ending 1921, the extent of migration from different sources was approximately as follows :—

	Percentage of immigrants.
Central India Agency States .. .. .	24
United Provinces .. .. .	12
Bombay Presidency .. .. .	11
His Exalted Highness the Nizam's Dominions .. .. .	11
Bhandara district .. .. .	9
Chhattisgarh districts .. .. .	33

(ii) It appears that there are two main streams of migration, the one comes in a south-westerly direction from the United Provinces and the Central India Agency States, which is caused by the general poverty and periodic scarcity in Central India and the lure of good wages and opportunities for obtaining work in the industrial centres of the Central Provinces. The other comes in a westerly direction from the Chhattisgarh Plain division and Bhandara district, which is caused by the poverty of the not very fertile land-locked plain and periodic failure of crops in the same region, as also the prevalence of a higher standard of wages in the developed portion of the province.

These two streams are streams (a) and (b) which have been described above. The third stream, which flows to the north-east from the bordering districts of the Bombay Presidency and the Hyderabad State, is on the wane on account of the development and more settled conditions of these parts. This north-easterly flow consists of stream (c) and part of stream (d). The streams of migration are illustrated by a map which is appended to this report (Appendix I).\*

The principal causes of migration are enumerated as famine and scarcity, unemployment, either permanent or temporary, the disappearance of hereditary occupations or cottage industries, the prospect of higher wages in urban areas, and inability of hereditary occupation to absorb an increasing population.

Migration of labour has thus followed the path of easy subsistence, that is, labour has congregated where the means of subsistence are in excess of the demands of the indigenous population. This general tendency is traceable in the above-mentioned streams of migration. The last census report shows that the vital statistics of the decade (1911-1920) record a deficiency of births over deaths in the Nerbudda Valley division, the Plateau division and the Nagpur, Amraoti and Akola districts of the Maratha Plain division, accompanied by a small excess of 3 per cent. in the Maratha Plain division taken as a whole. There is little doubt, however, that but for the influenza epidemic of 1918-19 which exterminated not less than 10 per cent. of the population, an increase would have been recorded in every division. The increase or decrease of natural population during the decade is as follows :—

	Increase (+) or decrease (—)	Total natural population in 1921.
Nerbudda Valley division ..	— 134,240	2,595,442
Plateau division .. .. .	— 55,113	1,601,359
Maratha Plain division .. ..	+ 75,072	6,014,171
Chhattisgarh Plain division ..	+ 336,365	4,847,278

The increase in the Maratha Plain division is so slight compared with its total population and level of development, that it could not have affected immigration to any great extent.

On the other hand, the Chhattisgarh Plain division in spite of its present undeveloped and backward condition shows a considerable increase in natural population indicating a surplus for emigration. Conditions in those Central India Agency States which contribute most to the south-westerly stream of migration are similar, an additional impetus for emigration being provided by the poorer quality of the soil.

Movements of labour like those of commodities originate from places where it is abundant and proceed to places where the demand exceeds the supply. The census figures indicate the existence of a surplus of labour at the origins of the particular streams of migration, and a demand in excess of the local supply at the places to which the streams converge.

\* Not reproduced.

(iii) *Changes in recent years.*—There is no information to justify any definite conclusion. It, however, appears that acute scarcity in the Central India Agency States and in districts situated on the northern border of the province in recent years has resulted in a greater influx of labourers by the south-westerly stream, and a considerable proportion of it has been deflected further south into the cotton districts and industrial centres by reason of failure of the wheat crop in the Nerbudda Valley division, which usually attracts a quantity of this labour at the time of the wheat harvest. Moreover, there being a direct route provided by the opening of the Nagpur-Itarsi railway line, the southern influx to the industrial centres is gaining in strength.

Agricultural development in the Chhattisgarh districts due to the provision of irrigation facilities has to some extent reduced migration from this source. At the same time the large irrigation works under construction in Chhattisgarh have absorbed a considerable number of labourers during the last decade. In 1927-28 the irrigation works employed 8,600 labourers, most of whom were recruited locally.

2. *Contact with villages.* (i) *Extent and frequency of return.*—Five different types of migration are recognized in the census report of the province. They are as follows :—

(1) *Casual*, consisting of movements between adjacent villages ; (2) *Temporary*, caused by movements of labour on works of construction or by the exigencies of trade or the stress of famine (in this type of migration there is a predominance of males) ; (3) *Periodic*, due to the seasonal migration of agricultural labour, or to the industrial demands for labour depending on the ripening of a particular crop ; (4) *Semi-permanent*, when the inhabitants of one place migrate to another for trade, but return at intervals to their native place where they sometimes even leave their families, and usually spend their declining years ; (5) *Permanent*, where economic or other reasons have caused a permanent displacement of population.

Casual migration does not come within our purview, as it mainly consists of movements between adjacent villages for non-industrial purposes. Temporary migration caused by movements of labour on new works of construction or by the exigencies of trade or the stress of famine are of short duration and the labour generally returns to its native place after the stress is removed or the work is completed. Famine in the northern districts and the border States of Central India in the current year, the construction work of railway bridges and alignment on the Itarsi-Nagpur line are instances in point. A predominance of males is noticeable in these cases, indicating that the emigrants are likely to return after a short interval. Periodic migrations, due to the demand for labour in seasonal industries and agricultural operations, are of the nature of an annual exodus, and such labourers return to their villages after the season is over. The attraction of labour to the cotton ginning and pressing industries and to the wheat fields of the northern districts for harvesting, are instances in point. Both males and females migrate together and return within nine months or less. The employees in seasonal factories thus almost invariably return to their villages after the season is over.

The permanent and semi-permanent migration of labour is due to the attraction of labour to coal and manganese mines, to the cotton mills of the Maratha plain or to the cement and pottery works of Jubbulpore and other industrial centres. The majority of these labourers return to their villages for a short visit after two or three years' interval, but a considerable minority has settled down at these industrial centres. There are no data for enabling us to fix even approximately the extent of this permanent labour movement.

The labourers in the cotton mills generally visit their villages once a year, or once in two years, either for the purpose of renewing their home relationships or for marriage or social ceremonies. In Nagpur, however, textile workers are much more permanent in their holds and the average frequency of return to villages does not exceed once in four years, and the workers are mostly permanently settled in Nagpur. In the manganese mines about 30 per cent. of the labour force returns to its villages yearly on leave for a period varying from four to twelve weeks.

In the unorganized industries, labour is mostly local and lives in surrounding villages. A few skilled workers from Mirzapur in the United Provinces are employed in the lac factories and a few from Maharashtra in the glass factories. The former return home after four to six months' work and the latter about once in two years.

(ii) *The extent of the permanent labour force.*—In the seasonal factories there is practically no permanent labour force.

In the cotton mills, the extent of the permanent labour force ranges from 90 to nearly 100 per cent., as in the Empress Mills and the Berar manufacturing mills in Badnera. At Akola, however, the proportion of permanent labour varies from 60 to 75 per cent.

The Central Provinces and Berar Mining Association reports that the permanent labour force consists of monthly paid servants from 10 to 15 per cent. of the total and about 50 per cent. of the recruited labour. The Central Indian Manganese Mining Company reports that the percentage of their permanent labour is 43. In the Chhindwara coal mines it is reported to be less than 50 per cent. Trade fluctuations affect the extent of labour force in both the coal and manganese mines. Moreover, many of the manganese and other quarries suspend operations during the monsoon ; and hence the extent of casual labour in the mining industry is very high.

In the cement and pottery works permanent labour amounts to about 60 to 70 per cent. of the total. In the gun carriage factory, Jubbulpore, it is about 85 per cent.

The extent of permanent labour in unorganized industries to which the Factories Act does not apply is at most 2 per cent.

3. (i) The cotton mills obtain their recruits at present from applicants at their gates. The location of the various industrial undertakings which employ immigrant labour is now fairly well-known through employees who return to their homes, and by this means recruits are attracted from the various sources of supply. But formerly *mukadams* were sent to recruit, or labour contractors were invited to supply the amount of labour required on payment of commission. The latter method is still adopted when a new mill is started or a new section is added to an existing mill. Casual work like that required for building construction is given on contract, and the contractors supply and employ their own labour.

Well-established perennial factories such as the gun carriage factory, Jubbulpore, and the pottery works at Jubbulpore, similarly receive their labour supply from applicants at the gate. The cement works, quarries and newly established factories recruit labour through *mukadams* who, in addition to their usual wages as employees, receive some commission from the new recruits.

Seasonal factories recruit their labour either through *mukadams* and *mukadammins*, who receive three pies per head per week from the labourers, and wages from the employers, or through labour contractors who are paid (up to Re. 0-4-6 per *bojha*) on the basis of total output ; or sometimes through a combination of both these methods. In the manganese mining areas labour is recruited by contractors through their *mukadams* or *sirdars*, who get into touch with villages at districts where it is known that labour is available and recruit them by families as far as possible. In the local mines recruitment is similarly done on a commission basis through colliery *sirdars* or labourers visiting their homes.

(ii) The system of recruitment through *sirdars*, *mukadams* or contractors has several evils, the chief of which is the payment of cash advances without which it is impossible to obtain recruits. These cash advances are seldom fully paid by the recruits, and, on the one hand, are apt to keep them in a state of perpetual indebtedness ; while on the other they cause loss and annoyance to employers as many recruits abscond with advances outstanding against them. The following extract from the Provincial Census Report of 1921 sums up the position :—

" *The system of cash advance to labour.*

" Two systems of recruitment are employed. Agents may be sent to the recruiting areas, who are servants of recruiting establishments ; they pay the labourer the expense of his journey, and also advance him a sum of money as an inducement to leave his home ; or labour may be bought from a private contractor at so much per head. In one of the Chanda coal mines a gang of Kols was working under a Pathan headman. This gang was recently working on the Mahanadi Canal head works in the Raipur district, had then been employed on railway earth work in Chanda, and finally had reached the coal mine. As each transfer occurred, the headman received a sum which was supposed to represent the loans outstanding against the labourers on their previous work. In this case it is doubtful if the labourers themselves ever received any of the advances in cash. Where advances are directly paid to the labourers, the amount varies considerably. In the Chanda coalfields as much as Rs. 90 per labourer is paid for immigrants from the United Provinces, and Rs. 10 to Rs. 15 for labourers from Hyderabad State. Rs. 60 per head may be paid for Chhattisgarh labourers in the manganese mines. The advance system is a vicious one, which is to the advantage neither of the labourers nor of the employers. The advance is seldom, if ever, repaid, and though the more reputable employers have agreements by which they decline to employ labourers recruited by other concerns, there is always a number of smaller and less scrupulous employers who avoid the expense of importation of labour by bribing the labourers of a neighbouring concern to desert them. From the point of view of the labourer also, the system is unsatisfactory, as it fastens about his neck a load of debt to the avoidance of which he devotes much ingenuity. At present, however, it is the only method by which labour

can be recruited from a distance, and even if wages were raised so as to attract labour without advances, it is the experience of most employers that the labourer, when he has received sufficient for his maintenance, ceases to work, so that a rise of wages is generally accompanied by a corresponding decrease in the work done."

Direct recruitment without any intermediary to intercept a portion of the charges of the labourer would, therefore, be much better, but as the great mass of Indian labourers is illiterate and ignorant, it is difficult in practice to suggest any improvement on the present system. The same factor operates against the successful working of a public employment agency. The difficulty of direct recruitment is illustrated by the fact that the Pench Valley Coal Company reports that it established a recruiting agency at Bilaspur in 1916 and closed it in 1928, as the results achieved were not commensurate with the cost incurred.

4. As the majority of the workers return to their villages annually, there is very little disturbance of the family life of the workers in the seasonal factories. Temporary or quasi-permanent recruits from the United Provinces generally leave some members of their family at their homes to look after the family cultivation and other affairs. If they decide to stay longer at the industrial centres, their family generally joins them. Labourers permanently settled in large towns like Nagpur and Akola usually bring their families with them.

In the manganese mining area the extent and effect of disturbance of family life are reported to be negligible, as it is the custom for complete families to be recruited. In the coal mines nearly 60 per cent. of the labour force is reported to consist of whole families.

6. *Recruitment for Assam.* (i) The bulk of such recruitment is from the three Chhattisgarh districts, and during the last two years from the Chanda district. From such information as is available it appears that although there may be disagreement as to the form of control, there is none whatever about the necessity of control. If all control is abolished, recruitment will be exposed to the old evils associated with the system of *Arkattis* (professional recruiters). Recruitment by these agents often resulted in kidnapping and abduction, the splitting up of families and the deceiving of the people with false stories regarding the conditions obtaining in the tea estates. It is also reported that free recruitment will result in lavish and uncontrolled expenditure, while it will not improve the lot of the labourers.

(ii) About 90 per cent. of the recruitment for Assam is effected by the Tea Districts Labour Association, who have appointed local agents in the different recruiting districts under whom garden sardars work. The local agents are, on the one hand, subordinate to the Tea Districts Labour Association, i.e., indirectly to the tea industry, and on the other hand, to the district magistrate and the Assam board. The industry, however, has a predominant representation on the board. The local agents provide accommodation, clothing, medical aid, etc., to properly registered recruits till they reach the "forwarding centres." All instances of abuse which are disclosed at the time of registering a recruit are reported to the district magistrate. If the local agent is found to be untrustworthy, his license can be cancelled by the district magistrate.

(iv) The cost of the present system is high, involving as it does the maintenance of an expensive recruiting agency, but it is an undoubted improvement on its predecessor and it is difficult to suggest a substitute which will maintain the present safeguards without imposing unjustifiable limitations on the free movement of labour. The representation on the board of the districts from which the recruits are taken might be strengthened by the addition of labour representatives.

7. (i) In the seasonal factories the skilled and semi-skilled labourer is thrown out of employment at the close of the season and often experiences considerable distress. The percentage of such labourers is, however, small.

No accurate figures are available regarding unemployment in the perennial industries. The Empress Mills report that there is a good deal of unemployment, both amongst the skilled and unskilled workers; they experience no difficulty in filling up vacancies and every fortnight many apply in vain for admission. Some of the other mills report that about 10 per cent. of the applicants for work are turned away. Some of the manganese mines in the Bhandara district report that owing to the present depression in the industry there is a certain amount of unemployment among local labour, but imported labour finds full employment. The Central Provinces and Berar Mining Association reports that since the inception of the manganese industry there has been little unemployment on account of shortage of work or excess of labour. Should, however, the cost of production of ore continue to increase, without a corresponding enhancement of market prices, the industry will no doubt have to face this question of unemployment. The Pench Valley collieries report that unemployment does not prevail in that area.

There has been some unemployment caused by dismissals in some of the low grade manganese mines which have been recently compelled to close down on account of depression in the manganese trade.

(iv) Unemployment insurance does not exist in any industry and all employers are of opinion that any such scheme would be unworkable.

8. *Labour "Turnover."*—(i) Here again no definite figure is available except in the case of one or two mills. The Empress Mills, Nagpur, have forwarded a detailed statement indicating the turnover of their labour since 1908. The average period of continuous service put in by a worker at these mills comes to 7.89 years. In the Pulgaon Mills the average duration of employment is 40 months. On a rough estimate the average duration of employment in other perennial factories may be put at 30 months.

The Pench Valley Coal Mines report that out of 3,700 workers, 800 have been in continuous employment for three years or longer, 700 for two years or longer, 650 for one year or longer and 1,550 for less than one year. The manganese mines report that the average duration of employment in any one year for the whole of the labour force is 9 to 10 months continuously, the remaining two or three months being usually utilized by approximately 30 per cent. of the labour in returning to their villages for seasonal cultivation. Normally the bulk of these return after the crops have been reaped.

(iii) From such information as is available the number of absentees is said to be from 10 to 5 per cent. per day. The percentage of absentees increases after pay day. For example, the manganese mines report that attendance decreases by 50 per cent. on the day immediately following the weekly bazar day; and the Chhindwara coal mines report that the number of absentees on days following pay day is as much as 30 per cent. over that on other days.

(ii) In the seasonal cotton factories about 20 per cent. of the labour force are casual. In the perennial factories the extent of casual labour is not appreciable and does not exceed 3 per cent. of the regular labour force. Such casual labour is employed mostly on building construction or on loading and unloading work. Mine owners report that there is no casual labour at their works.

## II.—Staff Organization.

10. The cotton ginning and pressing factories are mostly in the private ownership of Indian Banias, nearly one-third being owned by limited joint stock companies with Indian directors. A few of these companies are European and Japanese. Messrs. Ralli Brothers and Volkart Brothers are the two most important among European firms, and Goshō & Company, Toyomenkwa & Company and the Japanese Trading Cotton Company among Japanese firms owning such factories. The European and Japanese firms have managers of their own nationality, and other factories are under Indian managers.

Of the 15 textile mills, 11 are owned by public joint stock companies, five with purely Parsee directors, two with a mixed directorate of Parsees and other Indians, one with a mixed directorate of Europeans and Indians, and three with Indian directors. Four cotton mills are privately owned by Indian Banias. Two of the mills are managed by Europeans, two by Anglo-Indians, six by Parsees, and four by other Indians. The three cement factories and two of the pottery works are public joint stock companies under a mixed directorate of Europeans and Indians. The third pottery work is under an Indian directorate. The local managers of two of the cement factories are Europeans, while that of one is an Indian. Two of the potteries have European managers and the third, an Indian manager.

Of the six railway workshops, two have European managers and four Anglo-Indian managers. Three of the five motor car repairing shops are under Indian management, two under European and Anglo-Indian managers.

The tobacco (*bidi*) factories, the lac factories, the myrobalan factories and the two glass factories are owned and managed by Indians, with the exception of one myrobalan factory which is owned by a European company.

English boards of directors predominate in the manganese and coal mining industries. They own the most important deposits and work the bigger mines, having been the first to enter the field for prospecting. Out of 250 mines and quarries, the agents (as defined in the Indian Mines Act) of 92 are Europeans or Anglo-Indians, of 21 are Parsees and of 11 more are other Indians. Of the mine managers, 80 are Europeans or Anglo-Indians, 14 Parsees and the rest are other Indians.

11. The appointment of the managing staff is made as a result of open selection by the board of directors or controlling partners generally with due regard to the merits of the persons selected. The selection, however, is generally confined to the particular

community to which the capitalists owning the concern belong. The predominance of the Parsee element in the managerial staff of the larger cotton mills in the province with large Parsee interests is a very prominent feature in this province. In the smaller factories this kinship plays a more important part and selection is seldom free.

There is no open selection in the seasonal factories which generally recruit persons known to the management or owners.

In the mining industry, selection is more open, and based more on the qualifications of the persons, as the Indian Mines Act prescribes certain qualifications for work in the mines.

In these industries the head offices sometimes appoint specially qualified persons on agreements or covenants and in respect of such appointments the technical or managerial qualifications of the applicants are the main criterion. Europeans are sometimes covenanted in Europe and sent out. In the gun carriage factory, appointment on the managing staff is made by the Secretary of State, after selection by a board in England.

12. (i) The ginning and pressing factories mainly recruit their subordinate staff from outsiders. In a very few cases apprentices trained in the same factory are employed.

In the larger textile mills and the bigger perennial factories the subordinate staff is generally obtained by promotion from the ranks and from apprentices trained in their own factories. Apprentices trained in sister factories are also recruited. Jobbers are mostly promoted from the ranks in the same mill.

In the cement factories apprentices are recruited. In the gun carriage factory, foremen and assistant foremen are recruited by selection after advertisement, but chargemen and supervisors are promoted from the workmen and apprentices.

In the mining industry, foremen are generally recruited direct or from students or apprentices trained for the mining board examinations in some of the coal mines. Mates and sardars are recruited by promotion from miners. In the manganese mines new applicants are appointed by mine managers who, after training them, place them in grades according to their ability. In the coal mines, in making selection, consideration is given largely to the ability of the existing employees to handle labour decently.

(ii) *Facilities for training and promotion of workmen.*—The only facilities of this nature provided in the province are the following:—

The Empress Mills, Nagpur, have had a regular system of training apprentices which has been in force since the inception of the mills. The system provides for training apprentices (sometimes with university qualifications) both for managerial and supervising positions as well as for the subordinate supervising staff. An apprentice receives an incremental scale of pay during the full five-year period of apprenticeship and practically the whole staff of the mills is recruited from such apprentices. Many apprentices trained in this mill have also joined other concerns and the mill authorities report that "there have been instances of ambitious young men of ordinary education who by dint of self-help and unremitting toil have outstripped their brothers with superior initial qualifications."

The Gun Carriage Factory, Jubbulpore, maintains a regular apprentice class with a scheduled course of instruction for five years both theoretical and practical. Such apprentices are admitted after an entrance examination; and chargemen and supervisors are recruited from these. This institution also maintains a boy artisans' class for the benefit of the sons of their employees.

Some of the other perennial, and a few seasonal, factories also provide facilities for training their own workmen and apprentices, but no accurate figures are available. In important mines like the Ballarpur and Ghugus collieries in the Chanda district, and the Pench Valley and amalgamated collieries in the Chhindwara district, and the Central Provinces Manganese Ores Company's and the Central Indian Mining Company's manganese mines, training is given by the managers to miners who desire it for the qualifying examination. The managing staff always tries to train the ordinary miner as well; and mates and sardars are recruited from such trained hands. With the assistance of Messrs. Shaw Wallace & Company's collieries mining lecture classes were opened at Parasia and five students passed the third year examination in 1927. These classes, however, had unfortunately to be closed last year on account of the lack of students, due perhaps to the trade slump. Mr. G. O. Burgoyne, the manager of the Pench Valley coalfields, who was in charge of these classes, reports: "New applicants of the right sort for apprenticeship at the collieries have become rare and unless coal mining takes a turn for the better the classes will not continue to justify their existence."

13. (i) The relations between the staff and rank and file are reported to be good in all the industries.



(iii) Works committees are conspicuous by their absence in the industrial undertakings of this province and the employees are generally in direct touch with the managing staff.

The only exception was in the case of the Government Gun Carriage Factory at Jubbulpore where a works committee had been in existence for some time, but has been in abeyance since 1926. The objects of this committee were :—(a) to promote feelings of good fellowship all round ; (b) to improve out-turn ; (c) to improve educational qualifications of workmen ; (d) to suggest means of welfare work.

15. (i) In the ginning and pressing factories a good deal of work is done on contract. The labour contractors supply labour on payment on output, with a stipulated minimum, or on a commission basis. Pressing of bales, filling of cotton *bojhas*, picking and carrying of cotton seeds and carting, are some of the items of work done on contract. In the perennial cotton mills the work done by contractors consists of building construction, cartage, the loading and unloading of goods at railway stations and at mills, and stacking of bales of cotton yarn and cloth.

In some of the pottery works, quarrying and removing of clay and limestone are done by contract.

The most extensive employment of contractors as intermediaries exists in the mining industry. More than 50 per cent. of coal is raised by contract. In the Ballarpur colliery, all work, excluding safety work, ultimate supervision and management is done through contractors. In the manganese mines, ore excavations, loading and building work are done on contract.

(ii) Sub-contracting does exist on a small scale, but is not of much importance. The mines do not recognize sub-contracts.

(iii) The employers report that the fullest control is exercised by the officials of the industries over contractors' labourers and their working conditions. But the experience of the factory department is that there is a certain amount of slackness of control over conditions of work done on contract.

(iv) A certain amount of laxity in the observance of factory rules and regulations is observed in factories where much work is done on contract. This is specially true of the seasonal cotton and ginning factories. Control in the mines over the conditions of contract work appears to be adequate.

### III.—Housing.

16. (i) Housing accommodation is provided for about 7,500 workers by some of the larger factories and mills. Of these, approximately 3,700 are in the textile mills and 2,000 in cement, pottery and other works ; and 1,800 belong to other minor industries. Details of these employers and the extent of housing accommodation provided by each, are given in Appendix IV. It appears from this statement that 19 per cent. of the labour in the textile industry, and 7.5 per cent. of the labour in the minor industries, is provided with housing by the employers.

In addition to housing accommodation the Pulgaon Cotton Mills maintain a settlement covering an area of 15 acres, on which the millhands are allowed to build their own huts on payment of a nominal ground rent of 4 annas per annum per 100 square feet.

The improved housing scheme started by the Empress Mills at Indora,\* a suburb of Nagpur, deserves special mention.

This is the most systematic attempt made to solve the housing problem of the workpeople. It should, however, be noted that only the better paid employees can avail themselves of the advantages of this scheme.

A large proportion of the labour in the mining areas is housed in brick-built quarters provided by the mines, but no exact figures are available. The Central Provinces and Berar Mining Association reports that labour is fully provided with housing by the employers with the exception of such proportion of it as does not wish to live in pucca houses and prefers to build their own kuchha huts. The Central India (Manganese) Mining Company reports the same about the conditions in their mines. The managers of the larger Chhindwara coal mines report that at most of their mines the company has built up-to-date quarters for housing the labour force and staff resident on the mines. This housing scheme is still in progress at the mines. At the present time about 50 per cent. of the resident labour force is quartered in well-built houses, and during the next few years this percentage will be increased. The report seems to indicate that many of the labourers prefer to live in their own kuchha huts. The employers provide those who do with a free supply of land and hutting materials.

\* An account of this scheme is given in the firm's memorandum.

(ii) No housing accommodation is provided by Government for labourers. Government, however, fully co-operated in developing the Indora scheme of the Empress Mills at Nagpur by setting apart a large area of 200 acres and granting a lease on favourable terms. Local bodies like municipalities have done very little hitherto for the housing of workers, but some municipal schemes for the removal of congestion in working-class localities are at present under consideration. The Nagpur Municipality proposed a housing scheme for workers in a part of the city called Pachpaoli, but dropped it for lack of funds. The Khamgaon, Shegaon, and Khandwa Municipalities have also similar proposals under consideration for removing congestion in slums and providing better housing facilities for working-class people. These schemes, however, have not as yet materialised.

(iii) No houses have been built by private landlords in the industrial towns specially for the accommodation of the working-classes. A considerable percentage of the older established workers in the larger industrial towns, however, does live in houses provided by private landlords. A rough estimate puts the percentage of labour utilizing such accommodation at 25 per cent. at Akola and Nagpur.

(iv) About 85 per cent. of the workers live in houses constructed by themselves. No detailed figures or information are available. Some factory owners provide free land for huts for labourers; but in most cases the labourers have to take a lease of Government or private land. Government land is leased for building purposes in poorer quarters without any premium and at a rent of 1 anna per 100 square feet. Settlements of working-classes of this nature are common in the larger industrial towns like Nagpur, Amraoti, and Akola, specially in the cotton districts, and are locally known as "files." Although the amenities provided by municipalities for these labour colonies are negligible, the occupants have generally to pay house-tax or haisiyat-tax to the local municipalities at the rate of Re. 1 or Rs. 2 per annum.

As already mentioned above, a certain percentage (roughly about 40) of mine labourers live in huts constructed by them on land and with materials supplied free by their employers.

18. (i) All the regular houses provided by the factories and mines are brick-built and are of the type of one-room tenement, with a small verandah or open courtyard attached. The plinth of the room does not exceed one foot, except in the case of the big chawls, like that of the Model Mills, Nagpur. The average dimensions of the rooms are 10 ft. by 8 ft. by 7 ft., and the dimensions of the doors are generally 6 ft. by 3 ft. Small windows are provided, but they are not generally so located as to provide cross ventilation. The houses are generally constructed in the form of barracks, each block consisting of four to ten rooms. The Model mills quarters are of the type of double-storied chawls. The average number of inmates per tenement does not exceed five. The floor of the houses provided by the larger mills is generally of cement or murrum, but many of the houses in these mills and the houses in the smaller factories have kuchha floors. These houses compare favourably with those which the labourers generally occupy in the rural areas before they take to industrial life; but these colonies, except in the mining areas, have not the advantage of the open-air and ventilation of rural areas. Considering the fact that the standard of life of the lower classes in India is low it cannot be said that the accommodation provided is unsatisfactory from the point of view of the workers' requirements. The area available in the environment of the tenement for subsidiary domestic purposes like cooking, bathing and washing is, however, very small and very often the workers have to supplement the accommodation which is provided by enclosing the small verandah with bamboo partition or screens of cotton stalks, sometimes plastered with cow dung and mud.

As already indicated, the standard of the quarters provided by the Empress Mills at the Indora extension is superior to that of the ordinary rooms provided by other mills. Each room is 10 ft. 8 in. by 10 ft. 8 in. and has a front verandah 6 ft. 6 in. wide, as well as a back verandah 5 ft. wide, which latter has been enclosed to serve as kitchen and store-room.

With regard to mining areas, the Central Provinces and Berar Mining Association says that the houses provided are at least equal to those that the employees normally occupy in their villages. The Central Provinces (Manganese) Mining Company reports that the houses are 10 ft. by 12 ft. to 15 ft. by 20 ft., according to the number of members of the family and the average number of inmates is three. Labourers prefer a type of building which does not contain windows, but the houses are so constructed that there is an air space between the walls and the roof. Reports from the Chhindwara coal mines show that the houses provided more than satisfy the demands of the mines. Wherever pucca quarters have been constructed each man with his wife is accommodated in a one-room tenement with a private cooking verandah. These quarters are built in blocks of not more than four with high plinths and good roof, and the surroundings of these blocks are free of all obstacles, so that

the labourers can construct compounds if they so desire. For the better class of skilled labourers slightly better accommodation is provided, in that they are given two rooms with verandahs. For the Indian supervising staff the coal mines provide small detached bungalows with three or four rooms and a verandah, walled compounds, kitchen, latrines and bath rooms. From the reports received the standard of housing at the mines, specially that provided in recent years, appears to be superior to that of the accommodation provided generally by employers in urban areas.

The huts constructed by the workers themselves in the industrial towns and in the mining camps are, of course, of a lower standard. In these settlements all grades of houses from double-storied buildings of mud, bricks and country tiles (owned by some of the better paid workers) to mere hovels made of bamboo matting, not unlike wigwams, are to be seen. The most common type is a hut constructed of wattle and mud walls roofed with grass thatching, country tiles or sometimes with corrugated iron sheets, the height of which barely exceeds 6 ft. even at the ridge. Plinths are practically non-existent, and windows or openings are rare. In mining areas huts are generally of wattle and thatching, the door is too low, and the inmates generally cannot pass upright through the doors. Leaking roofs and damp floors are common during the rains.

(ii) From the point of view of ideal hygienic conditions the present accommodation of the labourers in urban areas must be considered to be capable of considerable improvement. A large percentage of the houses provided by the factories and mines are perhaps adequate in that they are not a danger to health. But it is most unsatisfactory that the same room should have to be used for residence as well as subsidiary domestic purposes like cooking. The inmates often improvise more accommodation by enclosing the verandah with bamboo tattas and other partitions. But this practice is not universal. Similarly, part of the courtyard is very often enclosed for a "nahani" (bathing and washing platform), but many of the workers have to perform these operations in the open without any privacy. Even the confinement of women takes place in the same room in which the family lives and cooks. There is very little cross ventilation, although it must be admitted that such windows as are provided are generally blocked up by the inmates themselves in order to keep off the sun and rains for the sake of warmth in winter.

There is practically no provision for outside street lighting in these settlements of the labourers, even in areas where the municipalities levy some tax on the occupants. Most employers, however maintain sweepers for keeping the areas fairly clean. There is no sort of drainage, and the sight of the waste water of every house accumulating into an insanitary cesspool is more the rule than the exception. Most of the mills and some of the factories provide common latrines for their labour colonies, and in many cases these are used especially by the women. But it is more usual for these labourers to resort to the open land and fields adjoining their colonies. This is particularly the case in mining camps where conditions are more rural. Water supply from wells or taps in some towns is generally adequate.

There are many cases of two or three brothers with their wives and sometimes with the addition of their parents using the same small room. But the results of enquiries into overcrowding in town made in connection with the last census of 1921 do not disclose any acute overcrowding in these areas. The number of families per house shows an average figure of less than 1, the maximum average being 1.05 family per house. The number of persons per house varies between the average of 1.73 to 6, the general figure being somewhere between 4 and 5. The average figure for the whole province has been 5 since 1891. The average number of houses per square mile was 23 in 1891, 21 in 1901, 25 in 1911, and 24 in 1921. Enquiries in connection with the preparation of living index numbers disclosed the following average and maximum figures per house at Nagpur and Jubbulpore. For workers with incomes ranging from Rs. 70 to Rs. 100 per month.

*Average persons per house.*

Nagpur	..	..	..	{ Male adult	..	..	..	1.47
				{ Female adult	..	..	..	1.47
				{ Children (under 14)	..	..	..	1.39
				Total	..	..	..	4.33
Jubbulpore	..	..	..	{ Male adult	..	..	..	1.28
				{ Female adult	..	..	..	1.17
				{ Children (under 14)	..	..	..	1.31
				Total	..	..	..	3.76

*Maximum number of persons per house.*

Nagpur	..	..	..	Male adult	..	..	2.4
				Female adult	..	..	2.4
				Children (under 14)	..	..	2.4
				Total	..	..	7.20
Jubbulpore	..	..	..	Male adult	..	..	2.2
				Female adult	..	..	2.1
				Children (under 14)	..	..	2.3
				Total	..	..	6.60

The greater danger to the working people springs from the insanitary surroundings rather than from the inadequacy of accommodation. The census report of 1921 says, "The conclusion based on the statistics is that, whether we look at the number of persons per house or the number of houses per acre, there is nothing at all comparable with the congestion in large cities in India, to say nothing of the slums of European countries. Indeed, from a sanitary point of view, it is probable that there is much more danger to the public health, arising from imperfect facilities for drainage, breeding-grounds for mosquitoes formed by stagnant water, and impure water supply than there is from the too great pressure of humanity on space."

In mining areas the housing provided by employers is reported to be suitable in every way from the hygienic point of view. The houses are so built that they can be cleaned cheaply and with ease.

19. The major portion of the regular accommodation provided by the employers is utilized by the workers, but in the mining area a large percentage of the workers seems to prefer to live in huts in the open. In urban areas nearly 75 per cent. of the families are often in a position to rent better accommodation outside the mills by pooling what they are prepared to spend on house rent and sharing houses. There is, perhaps, also some prejudice against the standard tenement provided by the mills, and a small percentage of the rooms provided thus remains unoccupied.

In mining areas the entire accommodation provided is reported to be utilized.

20. A comparative statement of average rent rates on the various classes of accommodation in some of the leading industrial towns is given below :—

Class.	Nagpur.	Akola.	Amraoti	Ellichpur.	Jubbulpore.	Raipur.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
(i) By employers ..	1 0 0	0 6 0	0 12 0	0 8 0	0 12 0	Free.
(ii) By landlords ..	2 0 0	2 0 0 to 3 0 0	2 0 0	1 0 0	2 0 0	1 0 0
<i>Ground rent of 1,000 square feet.</i>						
(iii) By workers themselves.	0 8 0 per month.	2 0 0 per annum.	2 0 0 per annum.	0 8 0 per month.	— —	0 4 8 per month.

No rent is charged for housing provided by mines.

21. Sub-letting does not exist to any appreciable extent and is prohibited in the quarters provided by the factories and mines. In some cases persons coming from the same villages as the occupants in quest of employment are temporarily accommodated. Reports have been received of stray cases of attempts to evict the workers from the chawls provided by the employers at the time of strikes, but the intervention of the executive authorities has usually stopped this. During the strike last year in the Akola Cotton Mills, Limited, the strikers refused to vacate their quarters when an attempt was made to evict them and continued to occupy the quarters throughout the period of the strike, which lasted forty-six days. The mill authorities have since then imposed monthly rents varying from 4 annas to 8 annas to emphasize the position of the workers as tenants,

22. It is remarkable that low standard of housing accommodation does not appear to have a serious moral effect. The standard of privacy is, of course, very low, but it is a fact that serious moral irregularities occur very rarely in these settlements. This may be attributed to the influence of religious and social traditions, which are deep-seated even in the lower classes of Indians.

#### IV.—Health.

23. General health conditions of workers are reported to be good on the whole in all recent annual reports on the administration of both the Indian Factories Act and the Indian Mines Act. The ravages of epidemic diseases such as plague, cholera, influenza, relapsing fever, small-pox, etc., are mentioned in the factory reports of 1915 to 1920. In 1921, too, mention is made of most of these diseases, but the attacks are said to have been milder. Later reports seem to indicate a healthier condition. In the mining areas slight outbreaks of small-pox, cholera, plague and influenza in a few mines were reported in 1927, while in 1928 outbreaks of cholera, influenza, malaria and small-pox in several labour camps occurred; 125 attacks and six deaths occurred in 1927, and 280 attacks and 61 deaths in 1928 from those diseases. It should be noted that most of these diseases prevailed during these years in an epidemic form in these areas, and were by no means peculiar to the labour population.

(i) Mortality figures exclusively amongst workpeople are not available. But private information from the following sources indicates that death-rates are :—

Factory Owners' Association for Khamgaon Ginning

and Pressing Factories .. .. . 20 per mille.

Burhanpur Tapti Mills .. .. . 11 ..

Pench Valley Coalfields, Parasia .. .. . 15 ..

The Empress Mills, Nagpur .. .. . 6.26 .. per annum from  
last five years'  
average.

The death rates between the ages of 15 to 50 years at the important industrial centres may be considered a fair index of the death rates of factory labourers. A few figures are given below :—

Industrial centres.	Death rate between the age period 15 to 50 years, per mille.		General death rate per mille.	
	1927.	1928.	1927.	1928.
Nagpur town ..	9.70	11.88	4.25	50.8
Amraoti .. ..	9.72	8.15	39.4	41.7
Akola .. .. .	7.03	7.55	28.0	35.0
Khamgaon .. ..	6.86	5.46	37.5	30.3

Mortality figures for the Empress Mills, Nagpur, are :—

Deaths in all.					
1924	..	..	..	..	51
1925	..	..	..	..	43
1926	..	..	..	..	74
1927	..	..	..	..	79
1928	..	..	..	..	66
Total	..	..	..	..	313 in five years. 66.6 per annum.

On 31st December, 1928, the number of hands on the muster roll was 8,934, and on 31st December, 1927, it was 8,782. So the death rates work out to :— 1927, 8.8 per mille; 1928, 7.5 per mille; and these figures are approximately the same as the Nagpur figures of mortality between the ages of 15 and 50 years.

(ii) Figures for birth rate and infant mortality amongst labouring classes alone are not available. The figures of birth and infant mortality relating to these classes cannot, however, diverge to any great extent from those of the general birth rate and general infant mortality in industrial towns. These figures for the principal industrial towns of the province are given below :—

Industrial towns.	Birth rate per mille.			Death rate per mille.			Infant mortality per mille.		
	1926.	1927.	1928.	1926.	1927.	1928.	1926.	1927.	1928.
Nagpur ..	59.23	58.47	56.35	48.28	42.50	50.86	302.33	353.59	290.47
Gondia ..	34.00	46.41	41.73	26.75	36.92	30.23	271.47	303.03	221.22
Hinganghat	45.23	48.02	47.09	49.30	30.64	29.42	278.92	213.08	241.98
Pulgaon ..	32.38	39.50	37.75	26.50	21.63	22.57	248.96	221.09	227.76
Jubbulpore	40.24	33.68	38.64	37.02	28.55	30.95	278.56	227.85	251.61
Katni ..	48.83	52.59	53.75	39.12	43.59	49.59	299.69	263.77	240.86
Khandwa ..	37.61	40.26	46.79	32.16	36.52	34.03	308.53	336.42	271.13
Burhanpur..	52.43	51.84	56.69	42.88	35.64	40.96	292.09	220.73	277.12
Amraoti ..	51.24	55.31	56.06	48.10	39.39	41.68	318.44	231.95	254.99
Akola ..	43.00	42.63	43.57	33.86	28.02	35.02	266.58	214.37	276.67
Ellichpur ..	49.83	51.84	50.29	42.64	36.99	37.40	288.82	196.13	237.10
Yeotmal ..	48.32	48.96	49.48	34.05	28.95	29.93	260.50	201.43	236.81
Khamgaon..	41.53	42.98	40.23	35.12	37.57	30.31	267.79	291.38	241.59
Raipur ..	39.64	38.65	41.86	33.33	38.70	36.33	300.00	303.64	315.89
Badnera ..	42.60	46.07	43.73	33.94	34.35	25.46	231.50	187.72	140.48

(iii) (a) Working conditions in the perennial factories, especially the larger ones, are satisfactory. There is plenty of scope, however, for improvement in ventilation, maintenance of a suitable temperature, suitable flooring, general cleanliness, proper spacing of machinery, and provision of places for meals and lockers for keeping them away from dirt and dust. In addition to these, considerable improvements are required in the seasonal factories for alleviating the dust nuisance and for proper lighting.

(b) Very little information is available regarding the working conditions obtaining in home industries.

*The Hand-loom Industry.*—The conditions are not very bad. Weavers are generally cleanly in their habits. Conditions at the homes of carpet and durrie makers are, however, not so satisfactory.

*The Bidi Industry.*—Home conditions are certainly inferior to those of the neighbouring population and some overcrowding has been noticed.

*Shellac Factories.*—Conditions are not satisfactory as overcrowding and insanitary surroundings, caused by insufficient drainage of waste water, exist. The director of public health, who has recently inspected a few of these factories, has recommended early action to effect an improvement.

(iv) Table No. II, on page 17 of the Bulletin on Index Numbers for Cost of Living at Jubbulpore and Nagpur, gives a list of dietary and average annual consumption per family of working-class people in both these towns. These data are fairly representative of the industrial centres of the province. The articles of diet and the quantities consumed per annum are :—

Cereals—				Nagpur.		Jubbulpore.	
Rice	..	..	..	488	seers.	331	seers.
Wheat	..	..	..	266	..	411	..
Jawari	..	..	..	39	..	101	..
Pulses—							
Arhar (tur) dal	..	..	..	65	..	64	..
Gram	..	..	..	26	..	13.8	..
Lakhori	..	..	..	24	..	1.5	..
Masur	..	..	..	2.8	..	15	..
Urad	..	..	..	1.5	..	8	..

The articles of diet and the quantities consumed per annum—*contd.*

Other food articles—

Gur .. .. .	9 seers.	14 seers.
Sugar .. .. .	9 „	15 „
Tea .. .. .	0.7 lbs.	1.2 lbs.
Fish.. .. .	2 seers.	1.2 seers.
Beef .. .. .	0.2 „	2.1 „
Mutton .. .. .	16 „	10 „
Milk .. .. .	13 „	43 „
Ghee .. .. .	4 „	10 „
Salt .. .. .	25 „	18 „
Chillies .. .. .	14 „	3.3 „
Turmeric .. .. .	2 „	2.2 „
Potatoes .. .. .	17 „	21.4 „
Onions .. .. .	18 „	7.8 „
Mustard oil .. .. .	2 „	4.2 „
Til oil .. .. .	17 „	7 „
Coconut oil .. .. .	1 „	1.5 „

In Chhattisgarh Division the dietary is slightly different, as the inhabitants in those parts eat very little wheat and jawari, which can, therefore, be neglected altogether, and their main cereal is rice, which is often taken in the form of "Basi," that is, rice kept soaked in water over-night or for several hours, and the consumption of vegetables, pickles and pulses is much smaller. Oil, ghee, and potatoes find only a small place in the dietary, and tea and sugar are rarely taken.

The diet indicated above is not satisfactory from a scientific point of view. The nourishment obtained compares unfavourably with that of western countries or Japan, as is evident from the comparison made in the statement given below :—

*Annual Consumption per Man.*

	United States.	Japan.
	lbs.	lbs.
Meat .. .. .	140	21.5
Fish .. .. .	21	50.5
Eggs .. .. .	30	2.1
Legumes (pulses) .. .. .	28	35.5
Bread and cereals .. .. .	340	309.4
Vegetables .. .. .	420	459.4
Sugar .. .. .	63	14.1
Fruit .. .. .	200	29.7
Other foods .. .. .	33	—
Milk .. .. .	500	2.2

In the United States of America, 500 lbs. of milk is consumed per head as well, whereas an entire worker's family in this province does not consume more than 90 lbs. of milk.

A statement showing the average constituents of the diet of a single man has been obtained from Akola, in which the monthly cost is also shown :—

			Cost.
			Rs. a. p.
Wheat	24 lb. in one month	.. .. .	2 4 0
Rice	16 „ „ „	.. .. .	1 10 0
Pulses	10 „ „ „	.. .. .	1 5 0
Salt	$\frac{1}{2}$ „ „ „	.. .. .	0 1 6
Red pepper	$\frac{1}{2}$ „ „ „	.. .. .	0 3 0
Ghee	1 „ „ „	.. .. .	1 0 0
Fresh vegetables	.. .. .	.. .. .	1 0 0
Tobacco, betel nuts, etc.	.. .. .	.. .. .	1 8 0
Total	.. .. .	.. .. .	8 15 6

(v) Considering the general inferiority of Indian physique, the physique of workers is said to be good on the whole in this province, though the average stature is short.

Some individuals were selected at random from textile mills and oil mills. Reports regarding physique have also been received from some collieries and seasonal factories. The average figures thus obtained are given below :—

Large figures thus obtained are given below :						Height.		Weight.
						ft.	ins.	lbs.
Textile mills—								
Hinganghat	..	..	..	..	..	5	4½	117
						5	3	120
Burhanpur	..	..	..	..	..	5	4	113
						5	6	118
						5	2	119
						4	11	108
Akola	..	..	..	..	..	5	6	116
						5	4	103
						5	2	101
						5	0	90
Jubbulpore	..	..	..	..	..	5	8	125
						5	5	125
						5	1	101
Coal mines—								Weight.
Ballarpur								lbs.
Telegu	..	..	..	..	..	..	..	140
Mahar	..	..	..	..	..	..	..	120
U.P. Man	..	..	..	..	..	..	..	150
Seasonal factories—								
Khamgaon	..	..	..	..	..	..	..	130
Nagpur (Ralli Brothers)	..	..	..	..	..	..	..	102
Raipur	..	..	..	..	..	..	..	125
Pandhurna	..	..	..	..	..	..	..	118

The differences between the weights of workers hailing from different places is often due to heredity. For example, the wheat-eating labourers from the United Provinces and Central India have, as a rule, a much better physique than those from other places. The recruits from the Bombay side come next, while the rice-eating labourers from Chhattisgarh are born with the poorest physique.

The chart published by the Factory Labour Commission of 1907 gives the following comparative figures :—

Province.	Average weight of spinners.	Average weight of prisoners.	Difference.
Bombay .. .. .	102·9	112·12	10·3
Central Provinces and Berar .. .. .	100·92	110·45	9·53
United Provinces .. .. .	107·01	115·08	8·07
Burma .. .. .	117·14	125·70	8·56
Bengal .. .. .	107·93	115·05	7·12
Eastern Bengal and Assam .. .. .	108	110·84	2·84
Punjab .. .. .	113·08	115·05	1·97
Madras .. .. .	113·63	114·38	0·75

(vi) Disturbance of sex ratio in the industrial towns of this province is not so marked as in larger cities like Bombay, Calcutta, or Ahmedabad, and very little practical effects of such disturbance have been noticed. In this province the tendency is for labourers to work as a family and to move together from one place to another, both man and wife contributing to the common purse. The census report of 1921, however, reveals that the proportion of females to 1,000 males is 864 in Nagpur and 762 in Jubbulpore. The total urban population consists of 754,989 males and 686,441 females, or a proportion of 909 females to every 1,000 males. The difference is not large and is partly due to the presence of certain trading classes such as Bohras, Marwaris, Bhatias, who reside for a portion of the year at their business centres and retire to their homes periodically.

In Akola, where the percentage of immigrant labour is high, it is reported that 25 to 30 per cent. of labourers live with their wives and families. There is no conclusive evidence to show that the prevalence of venereal diseases amongst industrial labourers is high or what the extent of these diseases is in this class. Mill authorities say that labourers so affected avoid the hospitals. The dispensary figures for venereal



diseases at one mill at Akola are only 2 per cent. Published figures from all the mill dispensaries are generally as low and in most cases lower still. The Tirody Manganese Ore Company report, however, that at their mines, the chief diseases are venereal, but no figures are given. The prevalence of venereal diseases is high in the Chhattisgarh districts and Nagpur.

Figures for the incidence of venereal diseases in some of the main town are as follows :—

Districts.	Venereal diseases treated.	Total number of cases treated during the year.	Percentage of venereal cases to total number of cases treated.	Percentage with respect to the population of the district.
1927.				
Nagpur .. .. .	3,917	244,601	1.60	0.494
Wardha .. .. .	738	118,700	0.62	0.159
Chanda .. .. .	755	85,153	0.89	0.112
Balaghat .. .. .	479	57,264	0.84	0.093
Chhindwara .. .. .	328	46,895	0.85	0.081
Amraoti .. .. .	1,132	191,940	0.59	0.124
Akola .. .. .	1,678	199,318	0.84	0.210
Yeotmal .. .. .	1,676	108,316	1.55	0.223
Buldana .. .. .	959	165,761	0.58	0.137
Jubbulpore .. .. .	671	110,973	0.60	0.089
Nimar .. .. .	813	93,886	0.87	0.205
Total for Central Provinces and Berar.	27,634	2,195,902	1.26	—

There is no reason to suppose that the incidence of venereal diseases among abourers is higher than among other classes.

(24). (i) The law requires that first-aid appliances shall be provided in all factories employing more than 500 persons a day, and in all important mines. But the employers in many cases have provided well-equipped dispensaries. Medical facilities are within easy reach of almost all the factories borne on the register as well as of every important mining area in the province. In many cases a retaining fee is paid to the local doctor in charge of the Government hospital or that maintained by a local body or some annual contributions are made to the hospitals by the employers for the treatment of factory cases.

Thirteen perennial factories (with a total daily number of operatives of 20,380) maintain dispensaries of their own under qualified doctors. Altogether, 1,86,634 cases were treated in these in 1928. Free medical treatment including attendance in their quarters or in camps is provided. Almost all the important mines maintain well-equipped dispensaries of their own. There are eight dispensaries with doctors and three without whole-time doctors. For the Pench Valley and the Amalgamated Coalfields, Shaw Wallace & Company maintain one main hospital and five branch dispensaries near Parasia. At the Ballarpur Colliery, 7,892 cases were treated in the mine dispensary. At all the larger mines of the Central Provinces Manganese Ore Company, Limited, well-equipped dispensaries with beds for male and female patients are provided. There are eight dispensaries with doctors and 15 without whole-time doctors. Weekly visits are paid to the smaller mines by assistant medical officers.

(ii) Government hospitals are provided in all important towns and industrial centres. Grants-in-aid are also given to hospitals and dispensaries maintained by local bodies.

(iii) Local bodies such as municipalities and district councils maintain dispensaries and hospitals and women's hospitals are maintained out of the Dufferin Fund in the larger towns. Private charitable dispensaries or hospitals financed entirely by public subscriptions, are extremely rare.

25. (i) Generally, medical facilities are utilized freely by male labourers. In the dispensaries of mills and perennial factories the number of cases treated was :— 1925, 111,669 ; 1926, 184,900 ; 1927, 358,300 ; 1928, 186,634.

The figures obtained from three important mines for the year 1928, are :—  
Ballarpur colliery, 7,892 ; Bharweli manganese mine, 4,115 ; Pench Valley coalfields, Amalgamated coalfields, 10,208.

(ii) Women workers are somewhat reluctant to accept medical facilities from male doctors. Hence they do not take advantage of the facilities provided except in case of serious illness. This prejudice is disappearing. Women workers, however, freely resort to women's hospitals wherever available. In the Empress Mills, Nagpur, two dispensaries for women are maintained under a qualified lady doctor, and it is reported by the management that the female employees are taking full advantage of the medical facilities and relief thus provided. A maternity and child welfare centre attached to a dispensary has been recently established by the Central Provinces Manganese Ore Company, Limited, at their Kandri mines under the charge of a qualified nurse. Although the services of the nurse are not as yet readily utilized by the labourers, it is reported that more advantage of the facilities provided is now taken than a few years ago.

The reports of maternity and child welfare work in Nagpur given in the annual report of the Public Health Department, as well as the attendance at the women's hospitals at different centres, show that women workers resort freely to these institutions.

The average attendance, including that of women in dispensaries maintained by the different industries, is given below :—

Textile mills .. ..	Six mills maintain dispensaries. Average number of cases, 398 daily.
Bengal-Nagpur railway workshop.	Average number of cases from the workshop to the general dispensary of the railway, 7 daily.
Manganese mines ..	Eight mines maintain fully equipped dispensaries under qualified doctors. Average number of cases, 90 per day. In 15 more mines medicines are stocked and medical officers pay periodic visits (weekly).
Coal mines .. ..	Eight collieries have fully equipped dispensaries under qualified doctors. Medicines are stocked in 3 more mines visited periodically by medical officers. Average number of cases, 141 per day.
Cement works .. ..	All three maintain dispensaries. Average number of cases treated, 36 per day
Pottery works .. ..	Two maintain dispensaries. Average number of cases, 9 per day.
Gun carriage factory ..	Two dispensaries are maintained. Average number of cases, 90 per day.

#### *Latrines and other Sanitary Arrangements.*

26. (a) (i) Latrines and urinals are provided at work places. There is also provision for the supply of drinking water.

If females are employed, separate latrines screened from those for males and marked in the vernacular in conspicuous letters "for women only" and indicated by a female figure shall be provided. Those for males shall be similarly marked "for men only" and indicated by a male figure.

(ii and iii) If the public water supply is intermittent, then there shall be provided a storage of water, fit for drinking, supplying at least as many gallons per day as there are persons employed in the factory. In the seasonal factories in the smaller towns latrines are, however, seldom used, as Indian workers invariably prefer the neighbouring fields or open land. Arrangements for washing or bathing or retiring rooms for women are not provided.

(b) Latrines are not generally provided, as workers are accustomed to resort to the open fields. In some of the larger towns, however, municipal latrines are provided for labour colonies and these are utilised. For bathing places most workers set apart a corner of their compound where they improvise a platform of stones. These are generally open and have no privacy. Water is generally obtained from the public wells provided by the employers or local bodies or from public (municipal) water standards. At times the supply is inadequate ; and for washing purposes labourers often resort to nallas or rivulets in the neighbourhood. This source of supply is frequently contaminated.

27. (i) There is a Provincial Board of Public Health, which interests itself in the general public health of the Province. The director of public health acts in consultation with this Board. There is, however, no special organization for the inspection of health, and sanitary conditions of operatives in industrial undertakings. Prior

to 1912, the civil surgeon of the district and his assistants used to inspect factories and mills; but with the introduction of the Act, 1911, this has been discontinued. The local medical authorities have no statutory power to inspect factories and factory owners do not welcome informal visits by them. The director of public health and civil surgeons inspect the labourers' colonies in the towns and interest themselves in the removal of congestion in the settlement of poorer classes and make suggestions from time to time to the local bodies for improving the sanitation in these areas. The sanitary staff of the local bodies also inspects labour settlements in the towns. There is, however, no special inspection of mills and factories.

28. (i) Under Section 37 (2) (g) of the Indian Factories Act, the local government has framed rules regarding the standard of ventilation to be maintained in factories. Inspectors have paid particular attention to this subject, and having regard to the climatic conditions, the ventilation of factories in this province is not unsatisfactory. There is one point which still requires further consideration, and that is the invention of some inexpensive and efficient method of alleviating the dust nuisance in cotton ginning and pressing factories. With the exception of rules regarding ventilation in factories and the control of humidification in cotton mills, there are no rules relating to the control of temperature in factories. It cannot be denied that temperature in most of the seasonal factories, and some of the perennial factories, is sometimes excessive, being higher than that obtaining in the majority of cotton mills. During the rains and cold weather the natural temperature is moderate and pleasant, but in the months of April, May and June, when a temperature of 116° F. in the shade is often reached, the sole problem is that of endeavouring to counteract the fierce heat of the outside.

(ii) Under the orders of the Government of India, following on the report of an expert appointed by them to enquire into the question of humidification in cotton mills, the local government framed rules relating to this subject. These rules came into force on the 15th August, 1926. Prior to this date there was no control exercised by the factory department over artificial humidification. Under the rules systematic readings of hygrometers and Kata thermometers were made compulsory. It was not, however, until the beginning of 1927 that all mill owners in the Province were able to equip themselves with the necessary recording instruments and they were therefore unable to comply with the rules immediately. Many already possessed hygrometers, but none the Kata thermometer. It was also found that in many instances existing hygrometers were not installed in positions necessary to give an accurate indication of the temperature of the rooms in which they were placed. Many managers experienced difficulty in mastering the methods of taking readings with a Kata thermometer and in consequence the inspecting staff had at the outset to devote a considerable amount of time to explaining the procedure and requirements of the new rules.

In the dry climate of the Central Provinces and Berar, where the shade temperature is often 116° F. and the natural humidity 25 per cent., humidification by artificial means is necessary in all departments of the mills except during the rains, when the natural humidity becomes excessive. The systems generally in use in this province are as follows:—

- (1) The underground gutter system.
- (2) The "Turbo" humidifier.
- (3) The "Vortex" humidifier.
- (4) The "Carrier" system.
- (5) The "Drosophcr" system.

System No. 1 gives the best results. This method has the additional advantage of ensuring adequate ventilation as the air is being constantly changed. In many mills efforts have been made to improve the circulation of the air by fixing simple paddle fans to existing shafting. Large exhaust fans have also been installed in some instances. Managers have made every effort to comply with the rules and a considerable improvement in atmospheric conditions has been observed in many mills. The use of steam when the temperature of a department exceeds 85° F. is prohibited by the rules and the mills have experienced no difficulty in complying with this regulation.

29. No record of industrial diseases is maintained in the province, but dust-asthma, bronchitis, consumption and other diseases of the respiratory system prevail in the industrial centres of the cotton country and pneumonia, tuberculosis, conjunctivitis, foreign bodies in the eye, ulceration, and respiratory diseases in the mining areas.

Skin diseases, such as scabies, ringworm and ulcers, are very common among industrial labourers, but are not peculiar to this class.

In confirmation of the above view, tables of patients treated at the dispensaries attached to the Pulgaon mill, which is not up to date in its equipment, and to the Empress mills (Nagpur), which is a very efficient, well-organized and up to date concern, are given below. The average number of mill hands at Pulgaon is approximately 1,500 and at the Empress mills, 9,000. Statistics of important industrial diseases are shown for these two mills for 1924 and 1928. Tuberculosis is conspicuous by its absence :—

Diseases.	Total number of patients treated.				Percentage of total cases treated.			
	Pulgaon Mills.		Empress Mills.		Pulgaon Mills.		Empress Mills.	
	Years.				Years.			
	1924.	1928.	1924.	1928.	1924.	1928.	1924.	1928.
Respiratory diseases ..	1,980	620	1,189	1,677	49·13	28·2	4·94	4·93
Skin diseases ..	716	175	4,146	7,391	17·77	8·0	17·18	21·74
Diseases of the eye ..	Not given		495	945	Not given		2·05	2·78
Venereal diseases ..	156	53	48	71	3·87	2·41	·20	·24

The figures from the dispensary of Bharweli manganese mine (Balaghat) illustrate the diseases of mining centres. These figures refer to the year 1928 only :—

Malarial fever .. ..	1,802
Respiratory diseases ..	287
Tuberculosis .. ..	60
Pneumonia .. ..	20
Diseases of the ear ..	40
Diseases of the eye (including foreign bodies in eye) ..	193
Skin diseases .. ..	195
Venereal diseases .. ..	15
Ulcers .. ..	584

Total cases treated.. 4,115

On an average there is one death every month from pneumonia.

Malarial fever is very common amongst workers and an investigation in 1921 revealed that 75 per cent. of the labourers in the Ballarpur coal mines and 22·4 per cent. of the labourers in the Bharweli manganese mines were infected with hook or other species of worm. The management, however, claims that the agricultural labourers of the locality are similarly affected. In 1921 the Provincial Director of Public Health made a special enquiry in the Empress mills, Nagpur, to ascertain the incidence of hook-worm amongst industrial workers and the following is an extract from the letter in which the results of his investigation were communicated to the mill authorities:—

“ Out of 6,740 employees examined by our staff, 714 or 10·59 per cent. show infection with hookworm and 1,417 or 21·02 per cent. with roundworm. The result of our enquiry has brought to light a valuable fact, that the infection from hookworm disease, which is the more serious, is not nearly so prevalent among your workmen as was expected. This is attributed to the good sanitary arrangements of your mills.

“ The town dwellers seem to make a free use of the mill latrines and these men show a very low percentage of infection in contrast to the workmen drafted from the neighbouring villages who show a much higher percentage, viz., 23·07 per cent.

“ The special staff has treated, up to 7th March, 161 cases of the hookworm disease among your employees with some apparent benefit, but the disease among your workmen is of a very mild type, and does not incapacitate them much.”

30. The Draft International Labour Convention concerning sickness insurance adopted at the conference of 1927, has been recently considered by this Government. A committee of experts consisting of representatives of employers and employees has considered the subject and come to the conclusion that any comprehensive

scheme of sickness insurance will not be practicable at the present stage of the industrial development of the province. It might, however, be possible to devise a scheme of sickness insurance to be applicable only to well-established perennial industries in which the labour force is reasonably stable. It is, however, anticipated that labour would be strenuously opposed to any compulsory contributory scheme. For example, a very liberal scheme of voluntary sickness insurance has been in force for the last nine years at the Empress mills, Nagpur. Under this scheme, employees contributing 8 annas per month are entitled to sickness allowance of Rs. 25 per month up to six weeks and Rs. 15 per month for a further period of eight weeks, and employees contributing 4 annas per month receive half benefits. But during nine years, not more than 50 out of nearly 9,000 employees have taken advantage of the scheme. The views of the local Government on the other aspects of this question are set forth in a letter to the Government of India dated 17th April, 1929.\*

31. Maternity benefits are at present given at the following five factories. The number of beneficiaries at each place is shown :—

	1928.	1927.	1926.
(a) The Empress Mills (consisting of five mills), Nagpur ..	202	215	191
(b) Rai Bahadur Bansilal Abirchand Spinning and Weaving Mills, Hinganghat.	53	61	42
(c) Messrs. Burn & Company, Pottery Works, Jubbulpore	15	10	10
(d) Savatram Ramprasad Spinning and Weaving Mills, Akola.	18	—	—
(e) The Akola Cotton Mills, Limited, Akola .. ..	4	—	16
Total .. ..	292	286	259

All these schemes are similar, leave of absence on full wages for a period varying from one to two months being given to expectant mothers, who are required to obtain from the doctor attached to the mill or factory an opinion regarding the probable date of confinement. Details are as follows :—

Mill (a).—Pays two months' wages to women employees who have put in 11 months' previous service. Half the amount is given previous to confinement, and the other half afterwards. The average amount paid every year, *vide* this head, is Rs. 4,800.

Mill (b).—Pays one month's wages unconditionally. Half is paid prior to confinement and half subsequently.

Factory (c).—Pays wages for six weeks at the time of confinement.

Mill (d).—Pays wages for six weeks to all expectant mothers.

Mill (e).—Grants leave for six weeks with full pay, or for three months on half pay, to those expectant mothers who have put in at least eight months' service in the mill.

There is no provision for maternity benefits in any other industry. In 1924 the Legislative Assembly declined to refer to the Select Committee a Maternity Benefit Bill brought forward by Mr. N. M. Joshi, the labour representative. In the Provincial Legislature notice of a similar measure was given simultaneously in 1928 by three members of the Council, viz., Mrs. Anasuyabai Kale, Mr. M. K. Golwalkar and Mr. R. W. Fulay, a member nominated on behalf of the urban factory labourers. The last named obtained the first place in the ballot, and the Bill was introduced on the 22nd January, 1929, and was referred to a Select Committee in August of the same year. The Bill has not yet reached its final form, but if it follows the Bombay Bill which was passed by the Legislature of that province in March, 1929, it will provide for maternity benefits consisting of eight weeks' wages to women workers for a period of one month, both before and after confinement, provided they have been in the previous continuous employment of the same factory for at least 11 months. It will also penalize the employment of such women, or their acceptance of employment, in other factories during the period for which they draw maternity benefits. Government accepted broad principles of the Bill, but was unable to secure a postponement until the views of the Royal Commission on Labour were known. It is anticipated that little opposition will come from the proprietors of perennial factories to which alone the Bill will apply.

\* Not printed here. The letter is reproduced in Appendix V to the Memorandum of the Government of India.

## V.—Welfare.

32. (i) Nowhere in the province except at the group of five cotton mills in Nagpur known as the Empress mills is there any appreciable organized welfare work. The Empress mills have a most comprehensive programme carried out with the co-operation of the local Young Men's Christian Association and the local Catholic Sisters. The Catholic Sisters devote their attention particularly to the welfare and education of women workers. A full description of the welfare work carried on by these mills is given in the report which they have already submitted to the Labour Commission and details are not therefore reproduced here.

Eight other cotton mills and four minor industries also carry on welfare work on a small scale. The benefits consist mainly of educational facilities for the children of workers, creches, cheap grain shops, and facilities for games. A tabular statement of these is attached :—

Names of industrial concerns.	Facility provided.
The Akola Cotton Mills, Limited, Akola. Number of operatives, 984.	(a) A creche under a competent nurse, visited daily by a doctor. Average number of babies 30 per day. Free milk and sugar supplied. (b) Free grinding of corn. (c) Free use of soap and water for washing. (d) Occasional cinema shows. (e) Free primary school for children of workers and half-timers.
The Tapti Mills, Limited, Burhanpur. Number of operatives, 1,551.	(a) Gymnasium (akhada), sports club and football ground. (b) A creche under two qualified nurses. Average number of babies 50 per day. (c) A factory school run by the municipality is attended by 138 half-timers and children of workers. Bonus for regular attendance, free books and stationery supplied to half-timers. (d) A cheap grain shop was opened, but has been closed for lack of support.
The Berar Manufacturing Company's Textile Mills, Badnera. Number of operatives, 1,482.	(a) A factory school for the education of 170 half-timers. (b) A night school was started, but dissolved for lack of sufficient attendance.
Reckchand Mohota Cotton Mills, Hinganghat. Number of operatives, 1,482.	(a) Contributions are made to the municipal school maintained at the mill, and half-timers are sent to it. (b) A cheap grain and cloth shop was in existence prior to 1927, but has since been closed.
The Savatram Cotton Mills, Limited, Akola. Number of operatives, 750.	(a) A creche under the supervision of competent nurse. Average number of babies, 15 per day. (b) A sports club for football and other outdoor games has been started.
The Gun Carriage Factory, Jubulpore. Number of operatives, 2,426.	(a) One Anglo-Vernacular Middle School with the aid of the Local Government for education of workers, children and half-timers. (b) Gratuity to workmen of long approved service or to their widows is paid out of a Fine Fund.
Cement works and potteries. Cement works, 3, and potteries, 3. Total number of operatives, 3,070.	(a) Two cement works and one pottery work maintain primary schools for the children of employees and half-timers. (b) In one cement works, a club for recreation known as the Kymore Gymkhana is provided. (c) Two cement works and one pottery provide a ground and accessories for out-door sports.

Names of industrial concerns.	Facility provided.
Raja Gokuldas Cotton Mills, Jabulpore. Number of operatives, 651.	(a) A gymnasium (Akhada) is established within the mills. (b) Attendance of half-timers to a municipal factory school controlled by the mills is compulsory. (c) Small dining sheds have been erected inside the mills. (d) A Temperance society has been started amongst the mill hands.
The Pulgaon Cotton Mills, Limited, Pulgaon. Number of operatives, 938.	(a) A factory school for half-timers and children of mill hands. (b) A Provident Fund to which contributions equal to that of the workers and interests are paid by the mill.
The Bansilal Abeerchand Mills, Hinganghat. Number of operatives, 1,536.	(a) A creche under competent ayahs. Average number of babies, 15 per day. (b) A factory school for half-timers only. Books are supplied free of charge. (c) Interest is paid on the Provident Fund deposits.

The mines make provision for the elementary education of the children of workers. The Kandri manganese mine has recently added a maternity and child welfare centre to its dispensary, and one is proposed to be opened near Parasia for Messrs. Shaw Wallace & Company's coal mines.

(ii) There is very little welfare work done by agencies other than the employers except the work done by the Young Men's Christian Association of Nagpur and Catholic Sisters of the Nagpur Convent, under Mother Superior Naomi in co-operation with the Empress mills authorities. These two bodies conduct welfare work amongst the labourers of the Empress mills, living in the town. The work of the Young Men's Christian Association is supervised by a Board consisting of the representatives of the mills and the Young Men's Christian Association. The Mahar Association of Nagpur also carries out some educational work amongst workmen of the depressed classes. During the last three years infant welfare centres have been established under the auspices of the Provincial Red Cross Association and the municipalities in some of the larger industrial towns like Nagpur, Amraoti and Akola. Some of these are in *mohallas* containing a large working class population; and workers are taking advantage of such centres in an increasing degree.

Missionaries are responsible for some welfare work in the mining areas of the Chhindwara and Chanda districts particularly in respect of education and temperance. Educational facilities provided by local bodies are also accessible to the working classes, the Independent Local Board for the mining areas of Chhindwara having provided six primary schools for the coal mines.

33. Except at the Empress mills no regular staff of welfare officers and workers has been appointed. At this mill the authorities have entrusted the administration of this work mainly to the Young Men's Christian Association. Medical officers, lady doctors, nurses, assistant and nursery school teachers are appointed by the mill authorities directly. The officer in charge of the co-operative cheap grain shop is also appointed by them.

At other institutions, doctors, nurses and ayahs and the few other welfare workers that are required are appointed by the mill authorities. The child welfare centres established during the last three years by the Provincial Branch of the Red Cross Association direct their efforts particularly towards improving the condition of working class mothers. There is no other official or non-official organization of welfare workers, and welfare departments, such as are found in European countries.

35. Where the work is systematically and conscientiously carried out, the result achieved are very satisfactory, as in the case of the Empress mills. Welfare work has in this undertaking undoubtedly made the operatives more contented, more efficient and more stable. Sir Sorabji Mehta, the general manager of the mills, reports: "All these forces have tended to create a better outlook on life. This may be gauged from the fact that the people are giving up some of their old evil customs. There is a distinct movement towards temperance and there is also a desire for the education of their children. The results of welfare work can never be accurately measured, but such work by its very nature provides facilities for the development of personality,

gives opportunities for self-expression and organization and meets certain needs of the people which perhaps would not be met if they were left to themselves." The benefits provided at the Empress mills amount to a real increase in wages, and are of more advantage to labour than an increase in cash earning, which might be mis-spent. Creches are very popular and are much appreciated by women workers of all classes. The provision of them militates against the pernicious custom of mothers drugging their children with small doses of opium to keep them quiet. At other industrial concerns, however, there is scope for improving and expanding welfare arrangements. With this object, Mr. Fulay, M.L.C., has introduced a Welfare Bill in the local Legislative Council, applicable to all factories employing more than 100 workers. The bill is pending the consideration of the Council.

36. Educational facilities have been provided by employers in the following industries only :—

(a) *Textile mills.*—(i) One mill provides night schools for adult workers and the average attendance at these is 400 ; (ii) seven mills have schools for children (half-timers) employed therein. Total average attendance is 700 ; (iii) three mills have schools for workers' children. Average total attendance is 575.

In all, about 1,680 persons receive instruction in the three Rs.

(b) *Coal mines.*—(i) An evening school, provided for adults in one mine in the Chhindwara district, is progressing satisfactorily ; (ii) three mines started schools for children, but these have now been taken over by the Independent Mining Local Board (in the Chhindwara district) which provides six schools in the mining areas. The mine owners contribute towards the cost by means of a school cess ; (iii) one school for children is maintained by a mine at Chanda.

(c) *Manganese ore mines.*—(i) There are no educational facilities for adult workers, except short lectures given at some of the mines for " First Aid " training and instructions on safety and other regulations to the mine mates and Indian supervisors ; (ii) schools are provided for children in eight mines, the average attendance in three of which is 80.

(d) *Cement works.*—(i) Schools are provided for the children of workers in two factories, the average total attendance being 66 or nearly 70.

(e) *Pottery works.*—One pottery has a school for half-timers and the children of the workers, the average attendance being 88.

(f) *Gun Carriage factory.*—There is an Anglo-Vernacular Middle School for the children of the workers, including classes for 15 half-timers and 51 boy artisans. The average attendance in the school is 270.

38. The co-operative movement has little hold on the workers of the province ; but the following instances may be cited :—

*The Empress Mills, Nagpur.*—(a) A co-operative store for the supply of cheap grain and cloth to the mill hands, registered under the name of Empress Mills' Co-operative Stores, Limited, is in existence where credit chits obtained by the employees from the mills are exchanged for grain or other necessities of life. The amount is deducted from the pay of the purchasers. Cash sales are also encouraged, the net profits being over Rs. 15,000 in the year 1926-27. Monthly sales were Rs. 27,750 in 1926-27 against Rs. 16,319 in 1924-25, and cash sales increased from Rs. 300 per month to Rs. 2,500 per month. At the beginning of 1927 a branch store was opened at Indora, and other branches are expected to be opened in different bastis of the town.

(b) The mill authorities maintain a voluntary provident fund open to their employees. The number of members on the roll on the 30th June, 1927, was 3,850, and contributions at the rate of 1 anna per rupee of wages are levied. The contributions of the members in two years ending on the 30th June, 1927, amounted to Rs. 1,80,700.

(c) The Empress mills' co-operative credit society was started in 1921, to provide credit at reasonable rates, and to free the employees from the grip of the money-lender.

*The Gun Carriage Factory, Jubbulpore.*—(a) A co-operative credit society is in existence in the factory for advancing loans to members at a low rate of interest.

(b) A co-operative supply store was in existence in the workmen's lines, where any workman could obtain food-stuffs at reasonable rates and on credit up to a certain limit, varying according to his pay. But, unfortunately, the concern was mismanaged and has been closed down this year.

(a) *The Akola Cotton Mills, Limited, Akola.*—A co-operative grain shop with 200 members has been recently started for providing grain at cost price to the mill hands.

The Pulgaon Cotton Mills, Pulgaon, and Rai Bahadur Bansilal Aberchand Mill, Hinganghat, have organized provident funds for their workers.



## VI.—Education.

40. (i) The children of workers in industrial areas are admitted to the existing educational institutions under the same conditions as apply to the rest of the population. Local bodies maintain an adequate number of primary schools at all the urban industrial centres in the province. The children in industrial areas are not under any special disadvantage in respect of educational facilities.

(ii) All the educational facilities provided in the factories have been mentioned in the previous chapter. As a result of the recommendation made by the Factory Labour Commission of 1908, schools were opened by Government in the vicinity of factories for the benefit of the juvenile workers during the shift hours. These schools, in accordance with the general policy that vernacular education for boys should be controlled by local bodies, were transferred to the local authorities concerned in 1917, but Government continues to meet the whole of their cost.

(iii) Beyond such facilities as are provided by the industrial undertakings which have already been described in the previous chapter, no special educational facilities for adults exist. Local bodies and Government maintain institutions for secondary and higher education in the industrial areas of the province.

41. In this province there are three Government industrial schools and six aided industrial schools to which Government gives substantial grants. Two more industrial schools are to be opened next year. These schools give training in carpentry and smithy. The course in most of the schools covers a period of two years. A vocational Training Committee was appointed in 1923 and in accordance with its recommendations a certain amount of general education has been included in the course, which has been extended to three years, in some of the institutions, while proposals for extending the course to three years in others are now under consideration. A considerable percentage of the passed students of these schools find employment in the industrial undertakings of the province. During the four years from 1924 to 1927 nearly 400 students passed out of these schools, nearly 30 per cent. of whom found employment in existing concerns and 40 per cent. started business of their own. There is also a Government Engineering School at Nagpur, the students of which have no difficulty in obtaining employment after the completion of the course. This institution provides courses of training, covering a period of four years, in civil engineering, mechanical engineering and automobile engineering, while the addition of a course in electrical engineering is under contemplation. The school pays special attention to practical work. For other scientific, industrial and technical training, for which the local demand does not justify the expense of establishing separate institutions in the province, there exists a liberal provision of scholarships for enabling the young men of the province to obtain training in institutions in India or in Europe and America. Every year a number of scholars are sent under this scheme to the Victoria Technical Institute, Bombay, the School of Technology, Cawnpore, the School of Mines, Dhanbad, and the Institute of Science, Bangalore. One technical scholarship is also awarded every year for advanced study in Europe or America.

42. There is no doubt that education effects a considerable improvement. The experience of the Empress Mills at Nagpur testifies to this fact; but no information based on a systematic study of the question is available.

## VII.—Safety.

43. The existing regulations under the Indian Factories Act (section 18) prescribes a number of guards and fences for dangerous machinery used in a few major industries and also empower the inspector to require such additions as he considers necessary. But there has been nothing in the form of an agreement between employers, operatives and inspectors concerning fencing of machinery, prevention of accidents in the textile or any other industry as has taken place in Great Britain and other industrially advanced countries. As a result, the prescribed guards do not cover such a wide range as is customary in Europe. Even the lay-out of new mills is not subject to any regulation for securing the above object. A comparison of the existing provincial regulations with the Notes of Agreement in the cotton spinning and weaving industry of Great Britain will bear this out.

44. The incidence of accidents in the different classes of factories is shown in the analytical statement (Appendix V). The daily average number of persons employed in individual industries and the number of accidents throughout the year are taken separately and the latter is expressed as a percentage of the former. The percentage incidence of some of the important industries is illustrated year by year for the last five years by means of diagrams in Appendix VI.\*

\* Not printed.

The incidence of accidents in cotton spinning and weaving mills is steady with a slight tendency to decrease in recent years, showing that arrangements for the prevention of accidents are on the whole satisfactory. In the cotton ginning and pressing factories the incidence of reported accidents is very low. Considering the number of unskilled labourers employed and the fact that work in seasonal factories is carried on in rural areas, the arrangements for the prevention of accidents in this class of factory also appear to be satisfactory.

In cement works and potteries, the incidence of accidents fluctuates in the neighbourhood of 1 per cent., there being a gradual decrease in the beginning, then a sudden rise in 1927, followed by a gradual decline. Though the number of persons employed in 1928 is greater than in 1927, the latter year was one of renewed trade activity, involving an increase in the labour force, which by the following year was in a better position to avoid accidents. The nature of the work done, and the heavy machinery used in this industry conduce to a higher percentage of serious and fatal accidents than elsewhere.

In oil mills there is a sharp rise in incidence of accidents to 1·36 per cent. in 1925 on account of increased trade activity and the opening of new factories, but the industry having settled down there has since been an appreciable decline.

Employment in general engineering workshops is very limited in this province and the curve does not show any peculiarity except the effect of stringent rules and precautions on a more or less settled minor industry. The rise in the incidence of accidents in automobile workshops is regrettable and is due to increased activity. The industry has not yet settled down, and new workshops are being opened.

An exceptionally high level of incidence of accidents is noticed in railway workshops and ordnance factories. Innumerable minor accidents occur in these two factories which are reported very punctiliously. Some of them are so slight that it is doubtful whether any notice would be taken of them in other industries. The sharp rise in the curves in recent years is probably due to the expansion of the factories concerned together with a demand for an increased output.

45. It is an accepted dictum in the field of industrial accidents that the rise and fall in accidents depend on the prosperity and depression respectively in the industry, and in fact constitutes a fair index of trade fluctuations. This applies more particularly to settled industries. In factories where increased output is obtained by the new erection, extension, or modification of plant, and there is an influx of fresh labour in consequence, a sudden rise in industrial accidents occurs. But if the prosperity continues and suitable preventive means are provided in the light of experience, the incidence of accidents declines, even though new or partially trained labour may be recruited under continued prosperity. The point in question is well illustrated by the curves of incidence of accidents in the following industries :—

Textile industry	..	<ul style="list-style-type: none"> <li>(i) Increase of 773 hands in 1926, with consequent rise in accidents (0·1 per cent.).</li> <li>(ii) Slight decline in number of accidents in 1927, with stationary conditions.</li> <li>(iii) Decline in accident curve in 1928 with an increase of 655 hands in the year.</li> </ul>
Cement industry	..	<ul style="list-style-type: none"> <li>(i) Increase of 12 per cent. in employees in 1927. Consequent rise in accidents (0·37 per cent.).</li> <li>(ii) Another rise of 25 per cent. in the number of employees in 1928. Perceptible fall in incidence of accidents.</li> </ul>
Motor workshops	..	<ul style="list-style-type: none"> <li>(i) Rise of 15 per cent. in the number of employees in 1927, with consequent rise in accidents.</li> <li>(ii) Another rise of 15 per cent. in the number of employees in 1928, with appreciable decline in accidents (0·2 per cent.).</li> </ul>

Some interesting facts are revealed by the curves shown in Appendix VII.\* The fatal accidents are all due to unforeseen events and the erratic character of the variations shows that chance plays the greatest part in such accidents. The curve of serious accidents on the other hand is the real index of progress in precautionary measures and enforcement of safety regulations, the effectiveness of which keeps such accidents at a low level. Causes of minor accidents are so very diverse and the scope for such accidents is so very wide, that no general deductions are possible.

The above general deduction, however, does not apply without qualification to some of the minor works. The incidence of accidents in the Gun Carriage Factory and the railway workshops is on a different footing, as a rise in accidents is noticed

\* Not printed.

in them in spite of the number of persons employed being on the decline or stationary. The following is a table of the average number of persons employed in these two classes of factories :—

Year.	Gun Carriage Factory.	Increase (+) or decrease (—)	Railway workshops.	Increase (+) or decrease (—)
1924 .. .. .	1,937	—	995	—
1925 .. .. .	1,953	+ 16	1,016	+ 21
1926 .. .. .	2,200	+247	1,256	+240
1927 .. .. .	2,400	+200	1,019	—237
1928 .. .. .	2,426	+ 26	1,040	+ 21

Occasionally a high percentage of incidence of accidents is noticed in electric power houses, ice factories and saw mills, but these variations are due to the limited number of persons employed.

46. The beneficial results of the enforcement of safety measures by the Local Government are apparent by the decline in the incidence of accidents whenever the conditions in the industry are steady. The efficacy of safety measures adopted is illustrated by the curve of incidence of accidents in oil mills. The curve rose to a peak in 1925, but has steadily gone down since then in spite of an increase in the number of mills and employees as indicated below :—

Year.	Number of factories.	Increase (+)	Number of persons daily employed.	Increase (+)
1923 .. .. .	9	—	260	—
1924 .. .. .	13	+4	356	+ 96
1925 .. .. .	14	+1	368	+ 12
1926 .. .. .	17	+3	502	+134
1927 .. .. .	18	+1	654	+152
1928 .. .. .	25	+7	715	+ 61

"Safety First" propaganda has been carried on by means of posters at the Health exhibition held by the Nagpur Municipality in 1928, in the section of Industrial Hygiene, organized by one of the Inspectors of Factories. "Safety First" posters relating to cotton textile mills are distributed by the organization of Mill-owners' Association Mutual Insurance for Workmen's Compensation, to those mills that subscribe to the insurance fund, and are being exhibited at about six mills in the province, this year.

In the Bengal-Nagpur Railway Workshops, too, some "Safety First," posters similar to those exhibited at Nagpur have been prepared and exhibited at different places.

47. There is no information on the subject, but a few accidents in such non-regulated factories as flour mills, rice mills and power houses have come up to the knowledge of the inspectors.

48. All factories employing more than 500 persons per day are required under the law to maintain first-aid appliances. But many of the cotton textile mills, important mines, cement factories, potteries and the gun carriage factory provide medical relief by maintaining well-equipped dispensaries, instead of mere first-aid appliances. Altogether eight factories have arrangements for rendering first-aid, and 15 factories provide medical relief in their own dispensaries. But almost all the other factories of any size have made arrangements for accident cases to be treated in the local public hospitals, towards the support of which they in return make a regular contribution.

49. (i) On an average the perennial factories are inspected thrice a year. The result of action taken for the enforcement of regulations will be apparent from the following statement of prosecutions :—

Prosecutions.	1924.	1925.	1926.	1927.	1928.
(1) For not fencing machinery .. ..	10	12	24	24	24
(2) For lack of protective clothings .. ..	10	5	11	3	19
Total .. .. .	20	17	35	27	73
(3) Prosecutions on all counts .. .. .	68	63	94	111	176

(ii) All seasonal factories are inspected once every season and 50 per cent. of them twice a season. Most of the prosecutions mentioned above pertain to seasonal factories and regulations are enforced with sufficient stringency in these. These factories, however, show a tendency to neglect safety precautions.

50. *Effect upon Safety of Hours, Health, Light and Working Conditions Generally.*—No statistics are available to illustrate the extent to which these factors are separately responsible for accidents, but it is obvious that long hours, poor health, bad lighting, and adverse working conditions must result in an increased number of accidents. But from a perusal of the evidence in a number of accident cases it is apparent that the usual cause is ignorance or breach of rule on the part of the injured person. From this it may be inferred that the most frequent cause of accidents is lack of discipline in industrial concerns, while a contributory cause is the wearing of loose garments which, though suited to a warm climate, are a source of danger in the neighbourhood of machinery.

### VIII.—Workmen's Compensation.

51. (i) The Act came into force on the 18th July, 1924. All District Judges have been appointed Commissioners under the Act for the areas within their jurisdiction. The figures of expenditure on compensation paid up to the end of the year 1928 are as follows :—

Year.	Awarded through Commissioners.		Paid by employers direct.				Grand total.
	Fatality.	Temporary disablement.	Permanent disablement.	Fatality.	Temporary disablement.	Permanent disablement.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1924 ..	No application.			5,753 0 0	928 0 0	383 0 0	7,064 0 0
1925 ..	15,889 0 0	392 0 0	1,234 0 0	8,332 0 0	2,667 0 0	2,368 0 0	30,882 0 0
1926 ..	16,656 0 0	7 0 0	3,302 0 0	6,224 0 0	2,139 0 0	11,660 0 0	39,988 0 0
1927 ..	21,915 5 0	8 12 0	2,544 10 0	8,027 0 0	2,250 6 6	5,656 2 3	40,402 3 9
1928 ..	Total for three classes.	19,800 2 0	—	6,927 12 0	2,659 6 11	5,090 1 9	34,477 6 8

(ii) No reliable information is ready, but the Commissioners report that there is no method available of ascertaining the total number of accidents taking place and the extent of possible claims. In the Wardha district one case in which the employer had not paid any compensation was reported by the factory inspector to the Commissioner, and though the employer was asked by the latter to take action, none has so far been taken nor has the workman instituted any proceedings. The Commissioners seem to be of opinion that provision for enabling them to compel the employer to take action is necessary.

(iii) No appreciably adverse effects are reported. Even before the Act came into force the larger employers were in the habit of paying a certain amount of compensation for fatal accidents and permanent disablement. The incidence of increased cost has not been severely felt.

The other points in connection with this subject have been recently investigated by the Director of Industries in connection with the amendment of the Act proposed by the Government of India, and the conclusions he has arrived at are set forth below :—

"The opinions of leading organizations of employers and employees were invited on the matter. No reply has been received from any organization of employees. The matter was also placed before the Board of Industries, who left it to a sub-committee.

After discussing the matter with leading employers and a few individuals associated with the trade union movement at Nagpur, I have to offer the following views on the sixteen main questions raised in the letter of the Government of India :—

(1) *The Scope of the Act.*—I do not think it is necessary to extend the Act to any fresh classes of employers in our province for the present. I, however, think that it is unfair to lay down the restriction on the height and purposes of buildings, and on the length of the bridge, as is done in the present Schedule II (vi) (a), (b) and (c). I have known of fatal accidents occurring to workmen employed in the repair of Government buildings without the dependants given any relief. There is no reason why such workers should be deprived of the benefits of the Act.

(2) *Compulsory Insurance for Compensation.*—All the employers I have consulted consider this impracticable at the present stage of the industrial development of the province. I think this may be dropped for the present, but there is room for a provision for making claims to compensation a first charge on the estate of an insolvent employer.

(3) *Payment in lump sum.*—Considering the improvident ways of the Indian labourers it would be ideal to provide for recurring payments, especially when the beneficiaries are women and minor children. It will, however, be too hard to impose the obligation for recurring payment on the employer. If the responsibility for making recurring payment is fixed on the Commissioner, such a system would be desirable. Otherwise the system of payment in lump sum should continue.

(4) *Scale of compensation.*—The present opinion in the province is decidedly in favour of leaving the scale of compensation unaltered. I do not think any increase is called for.

(5) *Waiting period.*—I think the present waiting period of ten days is not at all unfair; but when the disability extends beyond ten days, compensation should be paid for the full period of absence from work.

(6) *Addition to the list of relatives.*—It is difficult to give an exhaustive list of relatives. It would be best to add the words "or any other relative proved to have been actually dependent on the worker at the time of his death" to Section 2 (1) (d) the present Act.

(7) *Proof of dependence.*—Proof of dependence should be required from all relatives other than those specified in the present definition of the word "dependent" in Section 2 (1) (d) of the Act.

(8) *Compensation and number of dependents.*—The opinion received is against the suggestion of compensation being made to vary with the number of dependents and with the extent of dependence. I, however, think that when the number of minor dependents is large it is necessary to raise the compensation and recommend, as has been done by several bodies in the Bombay Presidency, that in regard to permanent total disability the amount of compensation should be 50 months' wages instead of 42, and the maximum should be Rs. 4,500 instead of Rs. 3,500, whichever is lower, in cases where the number of minor dependents exceed two. Similarly, in the case of death the amount of compensation should be 32 months' wages instead of 30 and the maximum of Rs. 3,000 instead of Rs. 2,500, whichever is lower, in cases where the minor dependents exceed two.

(9) *Section 12.*—It will cause hardship to the workers if the right of recovering compensation is made enforceable only against contractors and sub-contractors, as suggested in the opinions attached. The business of such contractors and sub-contractors is generally unorganized, and they often do not maintain any record of their employees. They will find it easy to evade their obligations to ignorant workmen. I am definitely of opinion that in the first place the responsibility for paying compensation should be fixed on the principal and a provision should be added for indemnifying the principal against the contractors or sub-contractors.

(10) *Penalty for not complying with the provisions of Section 16.*—There should be a provision for a small fine for delay or failure to submit returns.

(11) *Return of accidents when compensation not paid.*—The opinions received are against this suggestion on the ground that it would cause unnecessary addition to work. I think it is necessary to make some provision which will bring to the notice

of the Commissioner every case of accident so that the Commissioner might see that nobody entitled to compensation lost the benefit thereof. The amount of extra work entailed on the employers will be very trifling.

(12) *Claiming compensation through the employers.*—I have heard of cases in which the employers have sought to make their own terms with the injured workmen or with the dependants of the deceased workmen. I think it is desirable to make a provision which will relieve the dependants from the necessity of approaching the employers.

(13) *Safeguarding dependants against ignorance of their rights.*—Opinion is unanimous that the intimation of fatal accidents to the Commissioner should be made obligatory on the employers, and the Commissioner should be authorized to advise the dependants to take necessary action.

(14) *Register of relatives.*—All the employers are against the suggestion, as it would be impracticable and would entail unnecessary work on account of the migratory character of Indian labour. I am, however, of opinion that if such a register is maintained and periodically checked and kept up to date, it will be conclusive evidence of the number of relatives and dependants of a worker, and would facilitate the decision of disputes. Such a register, if kept up to date, will be of greater benefit to the employers than to the employed.

(15) *Power of calling for further deposit.*—Such a provision is necessary.

(16) *Suspension of distribution pending appeal.*—All agree that there is no objection to such a provision.

In the end I would suggest that it would be better to postpone further legislation in this matter till the Labour Commission completes its inquiry."

It may be added that the views of the Director of Industries were endorsed by the Local Government with the exception that it was not thought practicable to compel employers to maintain a register of employees' relatives.

## IX.—Hours.

### A.—Factories.

#### *Hours Worked per Week and per Day.*

55. (i) Under the Indian Factories Act, working hours are limited to 60 per week in accordance with the International Labour Convention. The daily hours of work are limited to the maximum of eleven hours, with a recess of at least one hour after a period of work not exceeding six hours at a time. The above limits are not exceeded except under special exemptions granted by the local Government.

But in industries working on a shift system, the total actual hours per week fall a little short of 60. For example, in textile mills and all ordinary factories (both seasonal and perennial), there are six working days in a week with ten hours of work per day. But for those seasonal and perennial (e.g., oil mills) factories, which are worked by shifts, the weekly total for each man varies from 54 to 60 hours (i.e., 9 hours to 10 hours a day). Exemptions from Sections 21, 22 and 26 of the Indian Factories Act are generally extended to cement factories, pottery works, electricity supply works, waterworks, furnaces, kilns, and such factories as have to maintain a continuous technical process or service. Workmen thus employed work eight hours continuously every day or 56 hours a week. Other workers in these factories generally work 9½ hours a day (with the usual recess) for six days in the week, or 57 hours a week.

Persons employed in railway workshops or other engineering workshops have duties fixed for eight to nine hours a day, or 48 to 54 hours a week.

*Normal, i.e., as determined by custom or agreement.*

Total number of factories.			Number of factories in which the normal weekly hours are							
			Men.			Women.			Children.	
			Under 48.	Between 48 and 54.	Above 54.	Under 48.	Between 48 and 54.	Above 54.	Under 30.	Above 30.
677	..	..	48	27	602	37	31	463	15	10
704	..	..	47	36	621	38	34	482	14	10
756	..	..	51	52	653	42	46	530	15	12

It is clear from the above that factories with hours of work exceeding 54 hours per week predominate.

(ii) The amount of overtime is negligible, even where it is allowed. Some mills and perennial factories employ a few of the exempted workmen on cleaning and machinery tests for about five hours on the weekly holiday, which brings their total to 65 hours a week. Otherwise the average actual hours of work are from 54 to 60 per week.

(iii) Spreadover applies to a very limited number of workers in this province, and no estimate can be made with any degree of accuracy. The operatives mainly affected by the question of spreadover are :—

(1) Jobbers and members of the supervising staff in the textile mills.

(2) Firemen, assistant firemen, engine drivers, mechanics and moohis in all factories.

(3) Furnace attendants, kiln attendants, motor and switchboard operators, persons employed in the raw material preparation department, crushing department, cement mill and power house departments of the cement works.

(4) Firemen and persons in the burning department of pottery works.

No reliable figures are available, but the Empress Mills report that spreadover does not exceed one hour per day.

56. The number of days worked per week is generally six. Only 40 factories, or about 5 per cent. of the total number are exempted from Section 22 of the Indian Factories Act, prescribing one holiday in a week. These factories work throughout the week for seven days.

57. (i) The reduction of hours has put a stop to conditions which were not easily distinguishable from "sweating." Prior to the restriction of hours imposed by the Act of 1911, textile mills used to work from sunrise to sunset with the same gang of workers, that is for nearly 12 hours in winter and about 14 hours' work in summer. The seasonal cotton factories used to work from 5 a.m. in the morning to 9 p.m. in the evening, generally with the same batch of workers without cessation, and sometimes they worked even longer when the state of the cotton market placed a premium on early delivery.

Wages, on the other hand, were not affected by the reduction in working hours. On the contrary, they have increased slightly with the rise in the standard of living. Piece-rates have also been increased, so that the total earnings of the piece-workers should not be diminished by the decreased out-turn. Workers have more leisure and undergo less fatigue. Leading employers, however, maintain that efficiency has not increased in the same proportion as working hours have been restricted, and that the workers as a body have not learnt to make better use of their increased leisure. The general health of workers, too, must have improved, though there is no statistical evidence on which to base this conclusion.

(ii) The immediate effect on industry has been an increase in the capital invested, and also in working costs, to maintain the same level of production. The burden, however, does not appear to have been excessive, for there has been considerable expansion in the cotton industry even during the last five years, two cotton mills and 97 seasonal factories having been newly constructed during this period. Perennial and seasonal factories of all kinds have also increased by 50 and 169 respectively. The level of production has not fallen, but has risen in many cases, particularly during the post-war boom. In cotton weaving and spinning mills there was an increase of 41 per cent. in the number of employees within the decade 1911-21, and from 1921 to 1928 there has been a still further increase of 20 per cent. Old plant and inefficient machinery had to be scrapped or renewed and new machinery of a more modern type had also to be installed in order to maintain the output.

58. As already stated, the daily limit has put a stop to the inordinately long hours of work which were previously in force, an abuse which was most common in seasonal factories, and has led to the introduction of the shift system, with an adequate number of relievers and proper periods of rest for all. The number of industrial workers has, as a result, greatly increased. Employers, however, complain that it is impossible to comply with "rush" orders during the busy season, for even though they are prepared to employ additional labour for that purpose, it is not always available. Employees, too, often deplore their inability to add to their earnings by working overtime on such occasions.

59. There has been no genuine demand for a reduction of hours, and the employers are opposed to any further reduction, particularly during the present trade depression. Sir Sorabji Mehta, of the Empress Mills, however, would welcome a reduction in hours, provided that it is of universal application. He considers that present hours are too long for the physique of the Indian worker, who in consequence absents

himself without permission. At present workers have insufficient interests in life to enable them to utilize increased leisure to the best advantage, and it is, therefore, better to concentrate on the improvement of their education rather than on a reduction of working hours.

60. Section 21 of the Indian Factories Act provides for rest intervals of one hour after a working period not exceeding six hours.

(i) The existing practice differs in different classes of factories :—(a) In factories working without the shift system for the first eleven hours an interval of one hour is allowed after five hours of work, generally about 12 noon, or for the night shift midnight. (b) In factories which work on the shift system, shifts are arranged to suit the convenience of the workers' meal times. Two typical time tables are shown below :—

	1st shift.	2nd shift.	3rd shift.
1st period { from .. .. to .. .. ..	5.30 a.m. 11.00 a.m.	8.00 a.m. 12.15 p.m.	5.30 a.m. 8.00 a.m.
2nd period { from .. .. to .. .. ..	12.15 p.m. 4.30 p.m.	1.30 p.m. 7.00 p.m.	11.00 a.m. 1.30 p.m.
3rd period { from .. .. to .. .. ..	— —	— —	4.30 p.m. 7.00 p.m.
Recess .. .. .	1½ hours	1½ hours.	3 hours each.
Total hours of work .. ..	9½ hours	9½ hours	7½ hours.

The above time-table is only suitable where the number of shifts does not exceed three ; for a greater number the following is substituted :—

Shifts.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
1st period { from .. to .. ..	5.30 a.m. 8.00 a.m.	5.30 a.m. 9.00 a.m.	5.30 a.m. 9.00 a.m.	5.30 a.m. 7.30 a.m.	7.30 a.m. 11. 0 a.m.
Recess .. ..	1 hour	2 hours	2 hours	1½ hours	2 hours. ,
2nd period { from .. to .. ..	9.00 a.m. 11.30 a.m.	11.00 a.m. 2.30 p.m.	11.00 a.m. 3.30 p.m.	9.00 a.m. 1.30 p.m.	1.30 p.m. 6.30 p.m.
Recess .. ..	2½ hours	1½ hours	1½ hours	2 hours	—
3rd period { from .. to .. ..	2.00 p.m. 6.30 p.m.	4.00 p.m. 6.30 p.m.	5.00 p.m. 6.30 p.m.	3.30 p.m. 6.30 p.m.	— —
Total hours of work	9½ hours	9½ hours	9½ hours	9½ hours	9 hours.

(ii) Labourers in this province usually take three meals at 8 or 9 a.m., 1 or 2 p.m., with a third, the principal meal, in the evening after return from work ; but the times may be altered to suit their hours of work. So long as these do not exceed ten the existing system in non-shift factories allows sufficient time both for meals and for periods of rest. But in factories which work by shifts the rest interval coincides with the time of a meal, and workers have often to work continuously for an unduly long period of six hours. It is, however, difficult to suggest a more convenient time-table for a ten-hour day.

61. (i) Sunday, or the local bazaar day, is observed as a weekly holiday. Sometimes, however, Muhammadan proprietors substitute Friday for Sunday.

(ii) The law is suitable and well adapted to local conditions for the days on which local festivals fall can be observed as holidays in place of the usual day without any inconvenience either to employers or to employees.



63. The exemption provisions are enumerated in section 30 of the Indian Factories Act. The exemptions which have been granted are tabulated below :—

Factories.	Exemption provision.	Exemption from.
3 cement works .. ..	Under section 30 (1) (c) due to necessity of continuous production for technical reasons.	Section 21 (rest period) and section 22 (weekly holiday).
5 electricity supply stations	Do.	Sections 21 and 22. Employed on 8 hours shift a day.
1 water pumping station ..	Do.	Do.
24 oil mills .. ..	Do.	Sections 21 and 22.
4 distilleries .. ..	Do.	Section 22.
1 gas works .. ..	Do.	Sections 21 and 22. To be employed on 8 hours a day.
2 ice factories .. ..	Under section 30 (1) (d) for supplying articles of prime necessity which must be made every day.	Section 22. A holiday to be given to each worker once a fortnight.

Exemption from observing the rest period (section 21) and the weekly holiday (section 22) is allowed roughly to 5 per cent. of factories.

Exemption from section 27 (i.e., weekly limit) and section 28 (i.e., daily limit) are given only to special classes of workers in different factories. Exemption under these sections has been allowed in the case of a few classes of workers in cotton mills, ginning and pressing factories, pottery works and glass works, with limits on the maximum overtime allowed; details are to be found in the Central Provinces Factory Manual.

Under section 30, sub-section (3), the local Government has exempted work on "urgent repairs" from the restrictions imposed by sections 21, 22, 27 and 28, provided that previous intimation of the same is sent to the Inspector and adequate payment is made for all overtime work in excess of 60 hours.

Advantage is usually taken of all these exemptions, and the factory owners and managers are opposed to any reduction in their number. At one time improper advantage was taken of exemptions for work on "urgent repairs" and it occasionally happens that the conditions subject to which exemptions are granted are not properly observed.

#### B.—Mines.

The limit prescribed by the Indian Mines Act is 60 hours a week for surface work and 54 for underground; but in actual practice these limits are usually not reached, and are never exceeded. At some mines the surface worker does not work for more than 6 hours a day, though at others he attains the maximum. Underground miners, who are piece-workers, work for 8 to 9 hours a day and 48 to 54 hours per week. No overtime is paid. No interval is prescribed, but no ill effects result from 8 hours shifts, as in practice the miners break off work from time to time for rest or meals.

A weekly holiday either on Sunday or the local bazaar day is observed.

There is general agreement that the provisions of the law regarding hours of work are adequate, but employers are opposed to any further restriction on the working hours. The restrictions imposed by the Mines Act of 1923 did not in fact make any difference, as the hours of work at that time did not exceed the maxima allowed by law.

The exemptions allowed by sections 24 and 25 of the Indian Mines Act are adequate, though not much use is made of the latter section.

#### D.—Other Establishments.

The most important of the industrial establishments, to which the Indian Factories Act does not apply, are shellac factories, *bidi* factories, *dal*, i.e., pulse grinding factories, myrabolam (barra breaking) factories, hand or treadle printing presses, brick and tile works, tanneries, forage presses and one glass factory. The hours of work not being subject to any regulation in these establishments, no accurate information is available; but work in excess of ten hours a day is certainly common.

Most of the establishments are seasonal in character, and payment being made in many cases under "ship" system (i.e., lump payment at piece-rates to a group of workers consisting either of members of the same family or of friends) no fixed hours of work are observed.



*Female labour in mines.*

No children under 13 years are employed.

Manganese	..	..	..	..	10,504
Coal..	..	..	..	..	2,075
Other mines	..	..	..	..	2,880

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Total	..	..	..	..	15,459
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Total of female labour	..	..	..	..	40,050
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82. The practice of female workers bringing their infants into the mills is discouraged, but still exists. Creches have effected considerable improvement in this respect in some of the larger mills. A circular under section 19 (a) of the Indian Factories Act has been in force prohibiting the admission of infants into the ginning and pressing factories. But children, sometimes of not more than five or six years of age, often bring meals for their mothers, and remain on the premises of the factory. The Empress Mills opened primary classes for these children as it was not found possible to stop the practice. Fortunately, few accidents are reported to have occurred among these children. But it is obviously desirable that the practice should cease and the only satisfactory remedy is the compulsory provision of creches and nursery schools at the factories.

83. The Act of 1922 has prescribed a limit of 11 hours a day for both male and female workers, with a proviso that women shall not be employed before 5.30 a.m. and after 7 p.m. The management of Empress Mills considers that with these hours for the commencement and cessation of work there is a risk that women will be molested on their way to and from their homes. For this reason, the hours of attendance have been so fixed for the last 12 years that women arrive after and leave before the men. As a result women cannot be employed jointly with men in departments where the machines must be in operation as long as the factory is working.

The regulations, however, are generally satisfactory, and sexual offences are extremely rare, particularly among the working classes.

84. Many factories have recently come into existence in remote places where provision for the certification of children is not available and inspecting staff is finding increased difficulty in verifying the age of employees suspected to be under 15 years. The employment of children, however, is gradually diminishing. In some factories children have to work continuously for five hours. It is desirable to make a recess compulsory after every  $2\frac{1}{2}$  or 3 hours' continuous work, as is the practice in the Empress Mills and some other factories. Apart from this there is no need to amend the regulations.

85. The simultaneous employment of children at more than one factory is prohibited by section 25 of the Indian Factories Act, but offences under this section are difficult to detect. The practice, however, is believed to be for practical purposes non-existent in the mills and is rare even in seasonal factories situated in the mofussil.

87. The employment of boys in occupations which offer no scope for their making a livelihood on attaining maturity is rare in this province. Boys are seldom recruited as messengers, peons, or call-boys in mills or factories. The doffer-boys and half-timers in the textile mills are gradually absorbed in the spinning department as siders, piecers or doffers.

88. Wherever the shift system is in force (*vide* Chapter VIII) double shifts for women and young adults are usual. Half-timers too are frequently employed in double shifts. No exact data, however, are available. From the point of view of health the double shift system is preferable, but it causes inconvenience to the workers who frequently live at some little distance from the factory.

89. A reference is invited to the remarks at the end of Chapter VIII. The regulation of the employment of women and children in factories not subject to the Act is certainly desirable and the local Government has considered from time to time the advisability of extending the Indian Factories Act to these establishments under section 2 (3) (b) of the Act. The question of extending the Act to *bidi* and shellac factories is still under consideration. As yet the Act has not been extended to these industries because mechanical power is not used in any of them and because they are little organized. The argument has been advanced that strict regulation would result in loss.

*B.—Mines.*

90. The effect of Act of 1923, so far as hours of work is concerned, has been salutary, and no difficulty is experienced in its operation. It is reported that as the result of the enactment of section 26, child labour between the ages of 8 and 13 has ceased to be employed.

The provisions for the certification and for prohibition of employment of women underground in coal mines appear to be suitable.

91. (i) Mine managers consulted report the provisions of the Act of 1923 to be suitable. The regulations introduced by the Government of India's Notification No. M.1055, dated the 7th March, 1929, are intended to eliminate gradually all women labour underground in coal mines by the end of 30th June, 1939. The practical effect of the prohibition is not yet known as the regulations came into force only on the 1st July, 1929.

(ii) The mine owners are unanimous that the exclusion of women from underground working has increased the cost of production. They assert that any extension of the regulations so as to exclude women from open cast mines would be disastrous to the manganese mining industry. The women on the mines form large percentage of the labour force and are in all cases employed on work suitable to them and not suitable to men. Two large manganese mines, in which there is underground working, owned by the Central Provinces Manganese Ore Company, Limited, one in the Balaghat district and the other in the Nagpur district, have been hard hit by the new regulations regarding the exclusion of women. Three hundred women were suddenly discharged causing reduction in the output as well as discontent among the labour force. The company has attempted unsuccessfully to have these mines classified as exempted mines so that the reduction in the number of women workers might take place gradually over a number of years as in the case of coal mines.

*Other Establishments.*

This question has already been discussed in the earlier portion of this chapter and in Chapter VIII.

**XII.—Wages.**

96. Beyond the average figures of monthly wages of various classes of labour, submitted by the factories every year for inclusion in the Annual Report on the Administration of the Indian Factories Act no regular and detailed statistics of wages are available. On the basis of these figures and such information as it has been possible to collect for the purposes of this enquiry, the average wages of the various classes of workers are indicated in the statement below. It will be seen that the rates of wages vary in the different industrial areas of the province. Broadly speaking, wages are highest in the cotton area of the province. Even in this area wages are higher in the districts of Berar (Amraoti, Akola, Ellichpur and Khamgaon) than in the cotton districts of the Central Provinces (Burhanpur and Hinganghat). The rates of wages at Nagpur are higher than those in other cotton districts in the Central Provinces. This is due to Nagpur being the Provincial headquarters and the largest town with six textile mills, the wages in five of which (constituting the Empress Mills group) have been higher for years. But even the Nagpur rates, particularly for unskilled labour, are generally lower than the rates prevailing in the larger towns of Berar like Amraoti and Akola. In Berar the supply of agricultural labour is inadequate and in consequence wages have been high for many years.

	Am- raoti.	Akola.	Kham- gaon.	Ellich- pur.	Burhan- pur.	Hingan- ghat.	Nagpur.	Jubbul- pore.	Katni.	Gondia.	Raipur.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
<i>Skilled.</i>												
Fireman ..	30 0 0	45 0 0	31 0 0	35 0 0	30 0 0	30 0 0	28 0 0	20 0 0	25 0 0	20 0 0	0 0	
Fitter ..	61 0 0	60 0 0	61 0 0	60 0 0	58 0 0	41 0 0	58 0 0	40 0 0	26 0 0	35 0 0	0 0	
Weaver ..	40 0 0	45 0 0	—	—	42 0 0	31 0 0	35 8 0	26 0 0	—	—	—	
<i>Semi-skilled.</i>												
Dyer ..	—	18 0 0	—	—	23 0 0	18 0 0	20 0 0	12 0 0	—	—	—	
Oilman ..	19 0 0	20 0 0	17 0 0	17 8 0	30 0 0	18 0 0	19 0 0	16 0 0	17 0 0	18 0 0	15 0 0	Rupees per month
Spinner (adult) ..	17 0 0	17 0 0	—	18 0 0	21 0 0	17 0 0	19 0 0	12 0 0	—	*	*	
Spinner (boy) ..	8 0 0	10 0 0	—	6 0 0	—	7 8 0	11 0 0	6 12 0	—	*	—	
<i>Unskilled.</i>												
Gin coolie (male) ..	23 0 0	23 0 0	19 0 0	19 0 0	—	19 0 0	17 0 0	—	—	—	—	
Gin coolie (female) ..	11 0 0	15 0 0	11 0 0	9 0 0	—	7 0 0	9 0 0	—	—	—	—	
Press coolie (male) ..	26 0 0	26 0 0	30 0 0	26 0 0	—	30 0 0	23 0 0	—	—	—	—	
Press coolie (female) ..	11 0 0	15 0 0	12 0 0	13 0 0	—	—	11 0 0	—	—	—	—	
Other coolie (male) ..	0 10 0	0 10 0	9 0 0	8 0 0	9 0 0	7 0 0	9 0 0	8 0 0	8 0 0	7 0 0	5 6 0	Annas per day.
Other coolie (female) ..	0 6 0	0 6 0	5 9 0	5 6 0	4 6 0	4 6 0	5 6 0	5 6 0	5 6 0	5 6 0	4 6 0	

\* Expeller men (wages Rs. 15 per month) and glass blowers (wages Rs. 15 to Rs. 20 per month) may be classed with spinners and blower boys with spinner boys (wages Rs. 9 per month).

The rates available for mining areas are as follows :—

Class of labour.	Coal.		Manganese.		
	Chhindwara district.	Chanda district.	Nagpur district.	Bhandara district.	Balaghat district.
	Per day. Rs. a. p.	Per day. Rs. a. p.	Per day. Rs. a. p.	Per day. Rs. a. p.	Per day. Rs. a. p.
<i>Skilled.</i>					
Overmen, sardars or mates	1 0 0 to 2 0 0	1 0 0 to 3 0 0	0 12 0 to 1 8 0	0 12 0 to 1 6 0	0 12 0 to 1 6 0
Coal-cutters .. ..	1 0 0 to 1 6 0	0 8 0 to 1 0 0	— to —	— to —	— to —
Miners .. ..	0 8 0 to 1 0 0	0 9 0 to 0 10 0	0 9 0 to 0 12 0	0 8 0 to 0 10 0	0 8 0 to 0 10 0
<i>Unskilled.</i>					
Loaders .. ..	0 8 0 to 0 12 0	0 9 0 to 0 12 0	— to —	— to —	— to —
Male coolies .. ..	0 7 0 to 0 9 0	0 6 0 to 0 8 0	0 8 0 to 0 9 0	0 6 0 to 0 8 0	0 6 0 to 0 12 0
Female coolies .. ..	0 4 0 to 0 9 0	0 4 0 to 0 4 0	0 5 0 to 0 6 0	0 4 0 to 0 6 0	0 4 0 to 0 6 0

97. The average monthly wages for the whole province, as given in the annual factory reports, are tabulated below :—

	Years.						
	1922.	1923.	1924.	1925.	1926.	1927.	1928.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Skilled.</i>							
Fitter .. ..	47	48	49	50	51	47	52
Boilerman .. ..	27	31	30	29	29	28	29
Weaver .. ..	31	28	37	34	31	31	31
Spinner .. ..	15	15	17	16	16	15	15
<i>Unskilled.</i>							
Coolie (male) .. ..	17	18	17	17	16	15	15
Coolie (female) .. ..	10	11	10	10	10	9	9

The table shows that there has been a general reduction during the last five years' the wages of unskilled labour having fallen steadily since 1923. The year 1923 marks a slight increase in the wages of skilled labour ; otherwise a general decline is noticeable since 1924.

It is difficult to draw any deductions regarding the movements of wages in recent years for such data as are available are conflicting. The figures of average monthly wages for the whole province, as published in the annual factory reports, indicate a definite decline in wages of unskilled labour since 1923. While such information

as we have been able to collect for the present enquiry from some of the mills, mines, and other works indicates a definite rise during the last five to eight years. Figures of such increases are as follows :—

Areas.	Percentage of rise in wages Per cent.
Nagpur, Bhandara and Chhattisgarh Division ..	20 to 25
Balaghat manganese mines .. .. .	5
Gondia (lac factories, etc.) .. .. .	15 to 25

It is difficult to reconcile the results obtained by enquiries made for the purpose of this report with the figures embodied in the annual reports. The latter are calculated on the basis of the figures of average wages prevailing in about 50 of the leading industrial undertakings of various classes, cotton concerns of Berar predominating. The only reliable information available is in the cost of living index numbers prepared by the Department of Industries for Nagpur and Jubbulpore since January, 1925. These show that real wages have on the whole varied with the rise and fall in the cost of living.

*Comparison of Nominal and Real wages with Cost of Living (Base, July, 1914).*

	Year.				
	1914.	1925.	1926.	1927.	1928.
	Rs. a. p.	Rs.	Rs.	Rs.	Rs.
Central Provinces.					
<i>Average monthly wages—</i>					
Male (unskilled) .. ..	11 0 0	17	16	15	15
Female (unskilled) .. ..	6 8 0	10	10	9	9
<i>Index numbers—</i>					
Cost of living .. ..	100 0 0	149	147	145	137
<i>Nominal wages—</i>					
Male (unskilled) .. ..	100 0 0	154	145	136	136
Female (unskilled) .. ..	100 0 0	154	154	138	138
<i>Real wages—</i>					
Male (unskilled) .. ..	100 0 0	103	98·6	93·8	99·3
Female (unskilled) .. ..	100 0 0	103	105	95·2	100·7

*Variation in Nominal and Real Wages at Nagpur (Base period—1914).*

	Year.				
	1914.	1925.	1926.	1927.	1928.
	Rs. a. p.	Rs.	Rs.	Rs.	Rs. a. p.
<i>Average monthly wages—</i>					
Semi-skilled .. ..	—	17	19	19	19 8 0
Male (unskilled) .. ..	11 0 0	16	17	17	17 0 0
Female (unskilled) .. ..	6 8 0	9	10	10	10 0 0
<i>Index Numbers.</i>					
<i>Nominal wages—</i>					
Male (unskilled) .. ..	100 0 0	145	154	154	154 0 0
Female (unskilled) .. ..	100 0 0	138	154	154	154 0 0
Cost of living .. ..	100 0 0	149	147	145	137 0 0
<i>Real wages—</i>					
Male (unskilled) .. ..	100 0 0	97·3	104·8	106·2	112·4
Female (unskilled) .. ..	100 0 0	92·6	104·8	106·2	112·4

98. No definite information is available on this question. The practice of remitting part of the wage earned to the place of origin is most common among immigrants from the United Provinces, nearly 80 per cent. of whom leave their families behind in their villages to look after their ancestral cultivation. These immigrants are said to remit nearly 75 per cent. of their income in this way. It is also reported that a few workers who have immigrated from Central India and the Bombay Presidency remit to their homes about 25 per cent. of their earnings.

99. Payment in kind is not common in this province. Some instances have, however, come to light. Fuel and light are supplied free to special classes of workers in some of the minor factories and to fitters in ginning and pressing factories, firemen and mechanics in rice and oil mills, Bhattawallas (lac melters) in shellac factories, blowers in glass works, kiln attendants and furnacemen in cement works and potteries. Some oil mills supply the workers with free oil for domestic purposes; and the extent to which housing accommodation is provided free or below the market rate has already been described in Chapter IV.

There is no organization, such as a trades union, which intervenes between the employers and employee for the purpose of fixing wages. These are usually fixed by oral agreement.

103. Wages are not standardized in different industries or in the same industry. It is even found that different rates are prevalent in the same industry in the same locality for the same work. This is illustrated by a comparison of the wages paid at the Empress Mills and Model Mills, Nagpur, or Burn and Company's Pottery and Perfect Pottery at Jubbulpore, or Reckchand Mohota Mills and Bansilal Aberchand Mills at Hinganghat.

Class of workers.	Nagpur.				Hinganghat.		Jubbulpore.	
	Empress Mills.		Model Mills.		Rai Bahadur Bansilal Aberchand Spinning and Weaving Mills.	Rai Sahib Reckchand Mohota Spinning and Weaving Mills.	Burn and Co., Pottery Works.	Perfect Pottery Company, Ltd.
	Minimum.	Maximum.	Minimum.	Maximum.	Average wages.	Average wages.	Average wages;	Average wages.
<i>Skilled labour.</i>	Rs.	Rs.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Fitter ..	62	122	20 0	125 0	32 0	45 0	37 0	78 5
Blacksmith ..	77	92	30 0	85 0	47 0	43 0	25 8	45 0
Carpenter ..	47	62	25 8	90 0	44 0	35 0	32 0	44 0
Engine driver	—	—	40 0	80 0	87 0	55 0	20 0	32 8
Boilerman ..	24	32	22 8	25 8	32 0	31 0	19 8	22 8
Mason ..	54	69	—	—	—	—	—	—
Weaver ..	22	50	25 0	50 0	30 0	32 0	—	—
Spinner ..	15	24	16 8	19 8	15 12	18 0	—	—
Dyer ..	18	25	18 0	24 0	70 8	18 4	—	—
<i>Unskilled labour</i>								
Coolie (male) ..	15	29	15 0	20 0	13 0	15 0	14 8	16 4
Coolie (female)	11	14	9 0	11 4	8 0	8 0	7 8	12 6

105. The subject of minimum wages was considered by the local government early in 1928 in connection with the questionnaire issued by the Tenth International Labour Conference. Opinions then received, including those of labour representatives, were opposed to legislation to this end.

Demands for minimum wages of Rs. 30 per month have been occasionally put forward at strikes, but such demands are usually made by leaders of the pleader class, who are aware of the practice in more highly developed industrial countries; it is doubtful, however, whether any such demand exists among the labouring classes, who do not understand the implications of the proposal. It has already been shown that wages are not standardized, and until in practice wages in the same or similar industries are more or less on the same level, it is difficult to see how a



minimum wage can successfully be brought into operation. A further difficulty arises from the fact that the cost of living varies in different parts of the province. In the cotton districts to which food grains are imported, the cost of living is definitely higher than elsewhere. Government has recognized this fact by the grant of dear district allowances to its lower paid employees. It follows that a minimum wage applicable to Berar or Nagpur would not be suitable for Jubbulpore. It is, moreover, doubtful whether the fixation of a minimum wage would be beneficial to labour. There is always a tendency for wages to gravitate towards a minimum fixed by law, and where, as in this province, the organization of labour is weak and consequently unable to combat this tendency, it is not improbable that legislation of this nature would result in a decrease in the total earnings of labour.

106. (i) Deductions do not appear to exceed the 5 per cent. of workmen's wages. Fines are generally imposed for:—(a) Breaches of discipline, like late attendance, absenteeism, misbehaviour, etc.; (b) bad work; (c) loss of, or damage to, materials.

All firms consider (a) as absolutely necessary for the maintenance of discipline but the fines imposed are nominal. Fines imposed for bad work or loss of, or damage to materials are generally higher, but only a very small fraction of the loss incurred by the management is recovered. In Bombay and other places the workman is compelled to buy the cloth or material spoiled at the price, but this practice is not in vogue in this province; in the case of the Empress Mills, the fines under this head range from 2 annas to Re. 1 (and average one-tenth of the loss caused). The practice of "double khada," i.e., the deduction of two days' wages for one day's absence, is recommended and adopted by the Millowners' Association of Bombay. It is, however, not in operation in this province except at the Savatram Mills at Akola, and even there, though nominally recognized, it has not been enforced during recent years.

(ii) Articles requiring frequent replacement, such as read-hooks, combs, split chains, etc., are issued to workmen and have to be regularly accounted for. Deductions are made for loss of these articles, which find a ready sale in the local bazaars. Deductions under this head amounted to Rs. 825 in one year in the Empress Mills, compared with a total wage bill of Rs. 3,92,859. The average of the total fine on all accounts in the Empress Mills amounts to Rs. 2,600 per annum, and is equivalent to 0.12 per cent. of the wage bill.

(iii) These deductions are generally spent for the benefit of the workers themselves by crediting them to provident or recreation funds, but occasionally are credited to the account of the firms themselves. The Empress Mills credit all unclaimed wages and fines to the pension fund. The Jubbulpore Gun Carriage Factory credits them to the gratuity fund. Burn & Company's Pottery and Perfect Pottery, of Jubbulpore, spend such fines on sports and prizes to the labourers. The Nagpur Automobile and General Engineering Company, Limited, refund deductions after a month if the conduct of the operative improves.

(iv) The question of legislation for regulating deductions was investigated by the local government about two years ago, in response to a reference from the Government of India. It appears that the system prevailing in the province is neither a source of profit to the employer nor a cause of harsh or improper treatment to the workers. It has, on the other hand, been effective in enforcing discipline, and preventing careless or negligent work. In recent industrial disputes in the province, the subject of fines has not been brought up as a grievance, and no complaints from employees regarding excessive fines have been made to the factory inspection staff. The employers of labour are unanimous in opposing legislation on the subject, and having regard to the conditions obtaining in the province, the local government has taken the view that it is unnecessary to introduce legislation on the lines of the English Truck Act. It is suggested, however, that it might be prescribed by a rule under, or an amendment of, the Indian Factories Act, and the Indian Mines Act, that the owners of factories and mines shall maintain a register in which the amount of fine or deduction from wages and the nature of the act or omission in respect of which such fine is imposed or deduction made should be entered. Such a register, which should be open to inspection by the factory or mines inspector, would furnish means for the verification of any complaints and would enable the local government to watch how far the system is abused in practice.

107. (i) In most cases wages are paid weekly, but sometimes monthly and occasionally fortnightly.

(ii) Weekly wages are generally paid on the bazaar day, and payment is made as soon as the wages are earned for the whole week, but sometimes wages are calculated up to the second day previous to the bazaar day.

The payment of monthly wages, however, is generally made between the 10th and 25th of the month following the one to which the wages relate. Interim payments as advances against the wages earned in the previous month are, however, often

made according to the workers' needs in the first week of the following month. At one time interest was sometimes charged on these advances, but the practice has now ceased. The larger mills take a week to ten days to complete all payments.

(iii) *Desirability of legislation.*—The question of legislation on this subject was investigated by the local government in 1924, in response to a reference from the Government of India. It appears that in the case of monthly payments, delays for periods exceeding 15 days are not usual, while in the case of payments on shorter periods than a month, the scale of four days' delay for fortnightly wages, two days' delay for weekly wages and one day's delay for daily wages, as suggested by the Government of India, is rarely exceeded. In the circumstances, therefore, and in view of the fact that no complaints on the part of workmen of delay in payment have come to its notice, the local government has so far concurred in the view of the managers of industrial concerns that the need for introducing legislation on this subject is not urgent. Should it, however, be decided on general grounds to undertake legislation on the subject, it is suggested that the measure should be confined to payments made monthly and that a period of 10 days should be allowed for payment on this basis.

(iv) Unclaimed wages are negligible in amount, except in cases of textile mills, where they are utilized for public religious celebrations by the workpeople. One or two mills pay them to claimants even if they turn up after a considerable interval.

108. A large percentage of labourers is indebted, but no reliable figures are available. Information received from employers puts this percentage between 25 and 50. The Empress Mills, Nagpur, have a flourishing co-operative credit society. Out of 4,500 members of the society, 2,431 are indebted to the extent of Rs. 5,10,224. The report of the mills adds that borrowing from outside has not yet ceased. If any inference can be drawn from these figures, the percentage of labourers indebted appears to be more than 50. The rate of interest is sometimes as high as 37·5 per cent. per annum. Loans are generally advanced by the ordinary Marwari and Bania moneylenders and in a very few cases by Pathans. Indebtedness is attributed mainly to the improvident character of the labourers, aggravated by customary ceremonial expenses. Employers deny that the low level of wages is to any appreciable extent responsible for indebtedness.

109. There is no scheme of profit-sharing in force in any industry. Some textile mills are reported to have granted bonuses from profits during the war boom, but payment of bonuses from profits is unknown at present. Some mills grant a regular attendance bonus to their workers up to Rs. 2 a month.

110. Leave without pay is always granted by the employers to ordinary unskilled workers, and the latter often avail themselves of it for visiting their native places or for ceremonial purposes.

The clerical and supervising staff are allowed one month's leave every year on full pay, while in the textile mills the subordinate staff is allowed leave up to 15 days. Other important industries also adopt similar practices, but in smaller factories and minor industries no leave is recognized or countenanced.

### **XIII.—Industrial Efficiency of Workers.**

No systematic study of this question has been made in the province, and very few accurate data are available on this subject. The following views are based on information provided by the Empress Mills, Nagpur, and a few mining companies.

112. The Empress Mills report that the reduction in hours of work has not resulted in any improvement in efficiency in their spinning department, and has effected only a slight improvement in their weaving department. The cost of production has also increased with increases in wages and other charges, and the net result is shorter working hours and more pay for the workers without any compensation to the employers. Although the increase in wages has tended to make the labour force of the textile industry more permanent, it at the same time became more irregular in attendance; for the workers absent themselves without permission whenever they like, being able to support themselves on the wages earned in a shorter period of work. This opinion of the Empress Mills is based on a careful study of the figures of production of their mills during the last quarter of a century.

Some manganese mine owners assert that there has been no appreciable increase in the efficiency of their labour during recent years, while the Central Provinces and Berar Mining Association reports that employment has been stabilized in the larger manganese mines, and there has been an improvement in the efficiency of miners; but no noticeable change has occurred in the efficiency of the workers in the coal mines. As, however, it has been reported in Chapter X, the Indian Mines Act of 1923 did not make any practical change in hours of work, any increase of efficiency must be due to other causes.

113. No systematic study of the question has been made in the province, but the Empress Mills report that although the wages paid to individual workers in India are much lower than those paid to workers in Lancashire, it has to be borne in mind that four to five Indian workers have to be employed on work which one Lancashire worker can do.

The manager of the Central India Manganese Company, Limited, is of opinion that compared to the efficiency of the Western countries, that of Indian workers is about 33 per cent. The manager of the Balaghat manganese mines is of opinion that in hand-drilling and mining the average Indian miner has only 10 per cent. of the efficiency of Western miners, which he attributes mainly to the difference in skill and methods of work.

114. (i) The Empress Mills report that although the turnover of their labour has improved from 18 months to eight years and labour has become steady on their mills, there has been no increase in production worth the name. There is not that steady application of workers which one expects from shorter working hours and better working conditions now prevailing in factories, and consequently production shows a fall in place of the expected increase.

(ii) The Empress Mills report that the use of machinery has led to increased efficiency on the part of workers. Such efficiency has ensued from vacuum stripping plant, automatic looms, ring spindles in place of mules and throstles in the spinning department. Eccle's drop-boxes have also given better results than Hacking's drop-boxes. No other information is available.

(iii) The Empress Mills report that efficiency of plant has improved the efficiency of the workers.

(v) The efficiency of workers varies with their physique. The Momins (Muhammadans) and Koshtis (Hindus) who have a better physique than Mahars (low caste Hindus) are more regular in attendance and produce better work as weavers.

(vi) It is obvious that the health of workers does affect their efficiency, but no reliable statistics of the incidence of sickness on the efficiency of workers are available.

(vii) Education is certainly a most important factor affecting the efficiency of the workers, and it is reported that the main reason why the efficiency of Indian labour is so much less than that of foreign labour is that the majority of Indian labourers are illiterate.

(viii) There is no doubt that the inferiority of Indian labour is largely due to its low standard of living, but there is no definite information available.

(ix) The climate in India is subject to such extreme variations that the Indian labourer is handicapped in this respect as compared to his European brothers. The excessive heat in summer decreases the efficiency of the workers. The ventilating and humidifying systems at No. 1 Mills (the oldest) of the Empress Mills not being so up to date as those at their No. 3 and No. 5 Mills, the warmth of the atmosphere in No. 1 Mills not only disturbs the evenness of the yarn made therein, but also decreases production and adds to the discomfort of the workers therein.

115. (i) The information supplied by the Empress Mills has already been referred to above. As a result of the reduction of hours, there has been no improvement in production in the spinning department, but there has been some improvement in production in the weaving department. The Empress Mills report that an experiment was made at their mills about half a century ago by the late Mr. J. N. Tata, the founder of the mills, with the object of improving production. He started working the mills with two shifts, each working for 12 hours with half an hour's rest period the day and night shift men changing places every fortnight. "The result was disastrous; for, the total production of the two shifts did not even equal that obtained by the usual day time working from sunrise to sunset." This was due to the night shift people not taking rest during the day time as they should, so that they were unable to keep awake at night, and their machines were left untended.

(ii) Good light and ventilation and efficient humidification undoubtedly improve production. The effects of the atmospheric conditions in No. 1 Mills of the Empress Mills have been referred to above. In the weaving department deficient light, ventilation and humidification affect production by about 5 per cent.

(iii) A few mine owners report that expenditure judiciously made on health and sanitation repays itself by preventing disease and maintaining labour in a more healthy condition, enabling it to give increased production. The same applies to expenditure on housing of labour.

(v) and (vi) The observation made by the Indian Industrial Commission of 1916-18 (paragraph 235) that "all authorities who are qualified to speak on the subject agree that Indian labour is content with a very low standard of comfort. This secured, the Indian workman, speaking generally, takes advantage of the greater earning power given to him by increased wages to do less work, and shows no desire to earn more money by working more regularly or by improving his own efficiency" still generally

applies to Indian labour. The mine owners report that the upward movement in wages tends to give a downward trend in production per head. The Empress Mills report that they cannot say that all that they have done to improve the wages and remuneration of their workmen has induced in their workpeople a desire to put more energy into their work.

(vii) Mine owners report that the effect of legislation has been beneficial to workers, but has increased the cost of production. The Empress Mills report that while legislation has ameliorated the condition of the workers, it has also been exploited by agitators who emphasize the responsibilities of the employer, but are silent as regards any corresponding obligation on the employees to become more efficient.

(viii) and (ix) Reports received indicate that a liberal diet brings about an improvement in production. The use of drugs by labourers is very rare. The Empress Mills report that the drink evil is not so prevalent among their workpeople as to attract attention or affect the production of their mills.

116. All employers are emphatic that better education would be the most effective method by which the efficiency of labour can be increased.

#### XIV.—Trade Combinations.

117. (i) The following associations of employers exist in the province :—

- (1) The Mechanical Engineers' Association, Akola.
- (2) The Factory Owners Association, Khamgaon.
- (3) The Central Provinces and Berar (Manganese) Mining Association, Kamptee.
- (4) The Central Provinces and Berar Coal Mining Association, Chhindwara.
- (5) The Katni Lime Burners' Association.
- (6) The Merchants' Association, Yeotmal.
- (7) The Merchants' Association, Jubbulpore.

(ii) The following associations of the employees exist in the province :—

- (1) The Nagpur Textile Union, Nagpur.
- (2) The Model Mills Labour Union, Nagpur.
- (3) The Press Employees' Association, Nagpur.
- (4) The Scavengers' Union, Nagpur.
- (5) The Textile Labour Union of Central Provinces and Berar, Nagpur.
- (6) The Motor Drivers' Association, Nagpur.

The above are registered in this province, but the following outside organizations have branches at Nagpur :—

- (1) The Railway Mail Service and Postal Union, Central Circle.
- (2) The Great Indian Peninsula Railwaymen's Union of Bombay.
- (3) The Bengal-Nagpur Railway Labour Union of Kharagpur.
- (4) The Clerks' Association.

118. These associations, with the exception of the Central Provinces and Berar Mining Association, Kamptee, are of recent origin, and cannot be said as yet to have produced any appreciable effect on the industries. These associations are, however, consulted by Government on all matters affecting the industries to which they relate and the relations of the employers and the employed, and the views thus obtained are always considered. An Advisory Board of Industries was established in the year 1914 for giving Government the benefit of its experience and opinion on industrial and labour questions and some of the associations named above are represented on the board. At some cotton centres the owners of ginning and pressing factories form combines (locally known as pools), with the result that only a few of the local factories are worked in the season and the rest remain closed. The total profits earned by the factories that work are distributed at the end of the season amongst the owners of all the factories in proportion to the number of gins and presses possessed by each. These combines have been successful in enhancing the cost of ginning and pressing at the expense of the cultivator. The matter has been brought before the local legislature by a member of the Council, and is now under the consideration of the local government.

Owing to trade depression in the coal and manganese industries, the mining associations have recently on several occasions approached Government for assistance, and the local Government has reduced the rate of dead rent on areas occupied by mines by 50 per cent. The local Government has also approached the railway board in order to secure a reduction in railway freights.

The associations of employers appear competent to safeguard the interest of their members, but trades unionism is yet in its infancy in the province, and Labour associations have done little to improve the conditions under which their members work.

119. Apart from taking part in a few recent strikes, trade unions have not displayed much activity as yet. The postal union branch has established a co-operative society and a mutual benefit fund for its members, and the clerks' association branch has a mutual benefit fund.

120. The history of individual trade unions and the attitude of employers to them are indicated below :—

(1) *The Nagpur Textile Union*.—The above union came into existence on the 11th December, 1927, by a resolution passed by the executive of the union and was registered under the Indian Trade Union Act, 1926, on the 23rd December, 1927. Out of 51 members of the Executive Committee, 39 are employed in the Empress and Model Mills, and the remainder are professional men such as pleaders and doctors.

The attitude of the employers has so far been conciliatory, and both the Empress and Model Mills, Nagpur, have recognized the union.

(2) *The Model Mills Labour Union*.—This union was brought into existence on the 5th December, 1927, by a resolution of a general meeting of the union, and was registered on the 9th January, 1928.

Out of 17 members of the Executive Committee, nine are directly concerned with the industry. In February, 1929, the operatives of the mills made representations formulating certain demands and pressing for the recognition of the union, but no decision has yet been reached.

(3) *The Press Employees' Association, Nagpur*.—The above union came into existence on the 5th February, 1928, following a resolution of a general meeting of the members, and was registered on the 11th February, 1928.

From the report of the association, it will be seen that there were 236 members on the roll on the 31st December, 1928. Out of 17 members of the Executive Committee, 12 belong to the industry.

(4) *The Scavengers' Union, Nagpur*.—The above union came into existence as a result of the recent strike of sweepers in Nagpur. It was inaugurated on the 8th April, 1929, by a resolution of a general meeting of its members, and was registered on the 9th April, 1929.

Out of 15 members of the committee, 10 are working as sweepers.

On the occasion of the recent strike, the district authorities and the municipal committee refused to hear the grievances of the sweepers unless they formed themselves a union, and were registered under the Trade Unions Act.

(5) *The Textile Labour Union, Central Provinces and Berar*.—This union was brought into existence on the 30th September, 1928, by a resolution of the general meeting of the members and was registered on the 11th April, 1929.

121. *Trade Unions Act, 1926*.—(i) The Act came into force on the 1st June, 1927, and six trade unions have been registered up to date.

(ii) It is too early to judge of the effects of the Act. Trade unionism is still in its infancy in the province and is more under the control of politically-minded members of the intelligentsia than of genuine workers. The two or three most active leaders of the trade union movement in this province belong to the legal profession. The unions have all been recognized by the employers concerned, though the Model Mills refused to do so for some time.

(iii) No amendment to the Act has been suggested nor has any necessity therefor yet been experienced.

#### XV.—Industrial Disputes.

123. Since 1921, there have been 36 strikes affecting the various industrial undertakings of the province, 29 being confined to the cotton mills.

(i) The causes which led to these industrial disputes may be classified generally as follows :—(1) Demands for increases in wages and allowances ; (2) demands for bonuses ; (3) demands for shorter hours of work ; (4) personal causes such as the dismissal or refusal to reinstate individuals ; (5) resentment at the adoption of disciplinary measures ; (6) resentment at reduction of allowances ; (7) political ; (8) others.

It was only in the case of two strikes that political causes were operative. In one (at the Pulgaon mills) in 1921 the management refused to close the mills on a *hartal* day (13th April) ; but these strikers also put forward demands for raising their grain compensation allowances in the course of the strike. The other strike on the Bengal-Nagpur Railway was a demonstration of sympathy with an office-bearer of the Railway Union who was arrested in connection with a strike outside the province.

Outside influences were traceable in only seven out of 35 strikes. Only three strikes, two at Nagpur and one at Pulgaon, were organized by labour unions. One strike at the Jubbulpore mills in 1923 is reported to have been inspired by sympathy with strikers at Ahmedabad. Otherwise, the strikes were for the most part local and did not present any special features though the demands of the strikers were occasionally extravagant.

In the following table the strikes are classified according to their causes :—

	Pay and allowance.	Bonus.	Hours of work.	Personal.	Discipline.	Reduction of attendances.	Political.	Others.
Akola—								
Hukumchand Mills (5) .. ..	1	3	—	1	—	—	—	—
Savattram Mills (4) .. ..	2*	—	2*	—	—	1	—	1
Jubbulpore—								
Raja Gokuldas Mills (7) .. ..	2	1	—	—	1	1	—	2
Municipal sweepers (1) .. ..	1	—	—	—	—	—	—	—
Nagpur—								
Empress Mill (2) .. ..	1*	1 (a)	1*	—	1 (a)	—	—	—
B.-N. Railway workshop (1) ..	—	—	—	—	—	—	1	—
Municipal sweepers (2) .. ..	2*	—	1*	—	—	—	—	1*
Rajnandgaon—								
B. N. Cotton Mills (4) .. ..	1	—	1	2	—	—	—	—
Pulgaon—								
The Pulgaon Cotton Mills (2) ..	1*	1 (a)	—	—	—	1 (a)	1*	—
Hinganghat—								
Bansilal Mills .. ..	1	—	—	—	—	—	—	—
Reckchand Mohota Mills .. ..	—	—	—	1	—	—	—	—
Burhanpur—								
The Tapti Mills .. ..	1	—	—	—	—	—	—	—
Badnera—								
Berar Manufacturing Co. Mills	1	—	—	—	—	—	—	—
Murtizapur—								
C.P. Railway .. ..	—	—	—	1	—	—	—	—
Yeotmal—								
Taxi-drivers .. ..	—	—	—	—	1	—	—	—
Kamptee—								
Municipal sweepers .. ..	1	—	—	—	—	—	—	—
Damoh—								
Municipal sweepers .. ..	1	—	—	—	—	—	—	—
Total .. ..	16	6	5	5	3	3	2	4

Note.—Where the disputes are caused by more than one reason the combined causes of disputes have been indicated by \* or (a) over the figure.

(ii) The following is a statement showing the duration of the strikes :—

Number of disputes lasting 2 days or less .. ..	2
" " " 2 to 7 days .. ..	8
" " " 8 to 15 days .. ..	11
" " " 10 to 30 days .. ..	6
" " " above 30 days .. ..	6
Total .. ..	33

(iii) The results of the disputes may be classified broadly as follows :—(1) Entirely favourable to workers ; (2) Partially favourable to workers ; (3) entirely unfavourable to workers ; (4) results unknown ; (5) inconclusive.



**XVI.—Law of Master and Servant.**

127.—*The Effect of the Repeal of Workmen's Breach of Contract Act.* No serious complaint has been received as a result of the repeal of the Act, but the Central Provinces and Berar Mining Association reports that the effect of the repeal of the Act has been to lessen the hold of the employer upon his recruited labour and has encouraged labourers to take advances from employers without any idea of fulfilling their obligations. When the Workmen's Breach of Contract Act was in force, on satisfying a criminal court of their *bona fides*, employers were able to obtain assistance from the criminal courts to bring back labourers absconding while advances were outstanding against them. They now find it impossible to recover dues of this nature, as the only remedy lies in the civil courts.

129. No statistics are available to show the extent to which the civil or criminal law is used to enforce the law of master and servant. Criminal courts have no jurisdiction *ad hoc*; and it is believed that few cases occur in the civil courts. The Workmen's Disputes Act is in force in the province but is rarely used.

**XVII.—Administration.**

133. It is not necessary in this memorandum to refer to the labour legislation enacted in the central legislature during the last eight years. Such legislation has been enacted on a very large scale. Mr. R. W. Fulay, a Nagpur pleader, who is associated with several local trade unions and interests himself in the welfare of labour, has been nominated by Government to the provincial legislature as a representative of urban factory labour. He and a few other members put several questions in the local legislature in the years 1921, 1925, 1927, 1928, and 1929, on various matters affecting the welfare of industrial labour. Government always gave as full answers to these questions as were possible from the material available. In the session of the Council in January, 1928, Mr. Fulay introduced a resolution recommending the appointment of a committee for an enquiry into the conditions of the working classes in the organized industries of the province such as mills, mines, and workshops. Government opposed the resolution on the ground that the working conditions in industries were not particularly unsatisfactory and the subject-matter of the resolution came more within the purview of the central legislature. The resolution was, however, carried by the council by 20 votes against 14 and the local government forwarded a copy of the debate on it to the Government of India for information. Mr. Fulay has also introduced a Maternity Benefit Bill and a Workmen's Welfare Bill in the local council, the details of which have already been referred to in this report. The commercial and industrial interests of the Central Provinces and Berar elect two members to the local council, one from the Central Provinces and one from Berar, and the Central Provinces and Berar Mining Association also elects one member. The attitude of the majority of the members of the legislature is, however, markedly sympathetic towards any measure affecting the welfare of labour.

135. Relations between the Central and Local Governments on labour questions have been satisfactory. Under the Devolution Rules (Schedule I, Part II, rule 26) industrial matters included under the heads factories and welfare of labour fall within the scope of the provincial legislature, but in all such matters there has been a tendency on the part of the local government to leave legislation more to the Central Government in order to secure uniformity of law and practice. The Central Government has regularly consulted the Local Government in respect of all the labour questions that have come up for consideration from time to time.

136. The department of Commerce and Industry of the Government of the Central Provinces is the administrative authority which deals with all labour questions; but the revenue department is consulted in all matters relating to mines. The Department of Industries under the Director of Industries, who is also Registrar of Co-operative Credit, is in immediate charge of all matters relating to labour. Under his general supervision the Chief Inspector of Factories with his staff of inspectors administers the Indian Factories Act. The Director of Industries is also Registrar of Trade Unions. All District Judges in the province have been appointed commissioners under section 20 of the Workmen's Compensation Act for areas within their jurisdiction.

There is no special labour office or labour officers in the province. The factory staff is utilized for collecting such information on labour questions as is required from time to time; but the necessity of some regular organization for the collection of labour intelligence has been keenly felt, specially in connection with the enquiries which the preparation of this memorandum has involved. With the advent of unionism, labour leaders have also urged on the Government the necessity of such



an organization. A board of industries, consisting of representatives of the employers and the employed, has been in existence since the year 1914, and all matters affecting the interests of labour are considered by this board. The board, however, acts in a purely advisory capacity.

137. *Effect of Differences in Law or Administration in Indian States and British India.*—This problem is not of importance in this province. The only industrial concern of any importance is one cotton mill in the Rajnandgaon State. The Indian Factories Act does not apply to it, but the employees of the mill, who number about 4,000, have by their unaided efforts secured conditions which are not dissimilar to those in similar concerns in British India. Recently the leaders of the Nagpur trade union movement tried to form a union of the employees of this mill, but did not succeed on account of the opposition of the State authorities.

138. Every effort has been made by the factory department to acquaint the workers with the provisions of the Factory Act and the Workmen's Compensation Act. Under the rules it is compulsory for a factory owner to place an abstract of the Factories Act, translated into the vernacular, in a conspicuous position in the factory premises. It must be remembered, however, that this alone is not sufficient as the majority of the workpeople are illiterate. The prosecutions that have been launched in recent years against the owners and managers of seasonal factories has, it is believed, been instrumental not only in acquainting workers with the law, but also in bringing home to them the fact that every effort is made to safeguard their interests both as regards safety and hours of work. It is believed that failure on the part of workers to take advantage of the Workmen's Compensation Act is rare.

139. (i) The factory staff consists of one chief inspector, whose duties are combined with those of the chief inspectors of boilers, and two inspectors. In addition sub-divisional magistrates have been appointed as additional inspectors, but have no power independently to pass orders. They exercise, under section 5 (a) and (b) of the Act, the power to enter and inspect a factory, reporting the result to the district magistrate. A number of medical officers have been appointed as certifying surgeons under section 6 of the Act for the certification of children in factories situated within the limits of the areas allotted to them. As far as the perennial factories are concerned, the staff would appear to be adequate, but during the short cotton ginning season the need of extra assistance is keenly felt. These factories are often situated in remote places where communications are bad and it is extremely difficult to pay surprise visits with sufficient frequency. During the year, 1928, there were 97 perennial and 659 seasonal factories at work. The perennial factories were all visited twice at least and in some cases three or more times; and with the exception of six newly registered concerns, all seasonal factories were visited at least once during the short season of four months.

(ii) The Act is an All-India Act and the rules framed under it by the various local governments were modelled on the draft rules circulated by the Government of India. A conference of Chief Inspectors of Factories was held at Simla in 1924, some two years after the advent of the new act, with a view to securing uniformity in the rules.

(iii) The number of visits paid to the factories, together with the number of prosecutions, are indicative of the rigour of administration :—

Factories on the register :—							1927.	1928.
Perennial	..	..	..	..	..	..	87	97
Seasonal	..	..	..	..	..	..	617	659
Total							704	756
Factories inspected by Expert Inspectors :—								
One visit	..	..	..	..	..	..	274	308
Two visits	..	..	..	..	..	..	232	229
Three visits	..	..	..	..	..	..	103	108
More than 3 visits	..	..	..	..	..	..	86	105
Total							695	750

The number of prosecutions has increased from 22 in 1923 (after the amendment of Indian Factories Act in 1922) to 176 in 1928, and convictions were obtained in practically every case.

(iv) The following table giving particulars of prosecution for the years 1924-28 inclusive shows the nature of the offences that are most prevalent :—

Year.	No. of prosecutions.	Results.	Convictions under sections.
1924 .. .. .	68	66 convicted..	26 under 41 (a) 1 „ 41 (b) 1 „ 41 (c) 13 „ 41 (f) 1 „ 41 (g) 8 „ 41 (h) 2 „ 41 (i) 3 „ 43 (a) 1 „ 43 (c)
1925 .. .. .	63	61 convicted..	24 „ 41 (a) 1 „ 41 (b) 1 „ 41 (c) 12 „ 41 (f) 3 „ 41 (g) 2 „ 41 (h) 1 „ 41 (i) 3 „ 41 (j) 1 „ 43 (c)
1926 .. .. .	94	94 convicted..	26 „ 41 (a) 1 „ 41 (b) 30 „ 41 (f) 4 „ 41 (g) 12 „ 41 (h) 2 „ 41 (i) 9 „ 41 (j) 1 „ 43 (c)
1927 .. .. .	111	111 convicted..	22 „ 41 (a) 12 „ 41 (f) 3 „ 41 (g) 19 „ 41 (h) 7 „ 41 (i) 6 „ 41 (j) 1 „ 43 (c)
1928 .. .. .	176	173 convicted..	21 „ 41 (a) 2 „ 41 (c) 36 „ 41 (f) 1 „ 41 (g) 15 „ 41 (h) 2 „ 41 (i) 7 „ 41 (j)

Fines ranged from Rs. 15 to Rs. 400 in 1928 against Rs. 15 to Rs. 300 in 1927. In some cases, particularly in those relating to the infringement of rules regulating hours of work, fines are too low to have any deterrent effect. The fines levied form a very small percentage of the profit earned by working the operatives beyond the legal time limit. District magistrates have been asked to ensure that adequate penalties are imposed in these cases.

**XVIII.—Intelligence.**

143. (i) Existing statistics on labour questions are extremely meagre. The only statistics that are available now are the following :—(1) Census report of 1921, which contains information on the general conditions of labour and an industrial census ; (2) annual reports on the administration of the Indian Factories Act on questions relating to factory labour ; (3) an annual statement of rural and urban wages of agricultural labourers and workers employed in cottage industries ; (4) annual reports on the administration of the Indian Mines Act, which contain information on questions relating to labour in mines ; (5) a bulletin on index numbers for the cost of living at Nagpur and Jubbulpore, specially prepared during the years 1926 and 1927 ; (6) a certain amount of information regarding health, housing, welfare and vital statistics is also available from the annual reports of the Departments of Public Health and Civil Hospitals.

(ii) The statistics in the census report were collected by the census staff by personal enquiry as well as from returns made by the managers of industrial concerns. The statistics in the annual report on the Factories Act are based on returns received from factory managers and on a certain amount of personal investigation made by the inspecting staff. The statement of annual rural and urban wages is prepared from information supplied by the revenue authorities of the districts after general enquiries made through Tahsildars. The statistics of the cost of living index numbers were collected by an officer of the Provincial Service, placed on special duty for the purpose, by personal enquiries in the labour colonies of Jubbulpore and Nagpur over a period of one year. The annual reports of the Departments of Public Health and Civil Hospitals are prepared from the registers maintained in the public hospitals in the interior and in municipal offices.

(iii) The Superintendent of Census operations remarks in the 1921 report that the accuracy of the industrial census was not ideal as the investigators often did not understand the exact character of the enquiries to be made and there was a distinct tendency on the part of the enumerating staff to give inadequate information. Further errors arose in tabulation as the low paid staff to whom it had to be entrusted was not, in spite of supervision, sufficiently intelligent for the task. It is believed that the percentage of error was not very great.

The same remarks apply to the statistics prepared every year for the annual report on the Factories Act from the returns submitted by factories. This work is often left to clerks of low education who cannot be expected to notice that a return is obviously incorrect. While statistics regarding the number of operatives and hours of work are generally accurate those of wages leave much to be desired. The statement of rural and urban wages is based on very rough and ready enquiries made at tahsil headquarters. The special officer deputed to prepare the Cost of Living Index Numbers had to contend with difficulties arising from the aversion of workers to supply true information about their affairs. But it is believed that the margin of error is not great, and the investigation disclosed sufficiently accurately the trend of the cost of living.

144. The only method by which more accurate and complete statistics can be secured is by the work being undertaken by Government. This would involve the creation of a separate department in the charge of a trained statistician. Power would have to be taken to enforce employers to give information, but care should be taken that they are not compelled to give information the disclosure of which would be injurious to their business. It is not anticipated that trade unions will be in a position to assist in the compilation of statistics for a very long period.

145. (i) *The Investigation into the Cost of Living.*—An officer of the Provincial Service was placed on special duty in 1927 and he conducted enquiries at Nagpur and Jubbulpore. The results of his labours have now been published in the form of a bulletin. These figures for the two towns are now being kept up to date every month. A copy of the bulletin has already been submitted to the Government of India.

**APPENDIX IV.****I.—Ginning Pressing Factories.**

*Average daily number of persons employed, 39,500.*

No regular housing arrangements are provided. Less than one per cent. of the operatives who belong to certain class of mechanics, such as engineers, fitters, etc., are provided with free quarters.

**II.—Cotton Spinning and Weaving Mills.***Average daily number of persons employed 19,500.*

Name of factories.	Description and number of rooms.	Accommodation available.	Accommodation utilized and rent paid.	Approximate number of operatives housed.
The Empress Mills	108 houses in Indora settlement, 72 rooms, i.e., 6 chawls of 12 rooms each. 60 supervisors' quarters.	72 rooms ..	Owned by workers. 56 rooms Re. 1 per month	294
The Model Mills, Limited.	600 rooms with verandah and path.	600 families	Free. 297 rooms. Re. 1 per month.	600
Rai Bahadur Bansil Mills.	Do. ..	50 families	Re. 1 per month	100
Burhanpur Tapti Mills, Limited.	Kutchha .. New .. Old pucca ..	232 31 185	Free .. .. 8 annas per month. 6 annas per month.	950
	Total ..	448		
Akola Cotton Mills Limited.	—	330 rooms ..	4 annas per month. 6 annas per month. 8 annas per month.	600
Berar Manufacturing Company.	—	—	12 annas per month.	558
Vidarbha Mills	—	224 rooms ..	8 annas per month.	450
Raja Gokuldas Mills.	—	59 quarters	12 annas per month.	112

**III.—Other industries registered under the Indian Factories Act.***Average number of persons daily employed 12,180.*

Name of factory.	Description and number of rooms.	Accommodation available.	Accommodation utilized and rent paid.	Approximate number of operatives housed.
(a) Gun Carriage Factory.	775 quarters ..	—	12 annas to Rs. 4 per month.	666
(b) Bengal - Nagpur Railway Workshops	127 quarters ..	97 occupied	8 annas to Rs. 2 per month.	97
(c) —	—	—	—	—
(d) Laxmi Oil Mill, Akola.	Huts are built on factory's land.			33
Amrit Match Factory, Kota.	—	150 operatives.	Free ..	25 closed
(e) Central Provinces Portland Cement Works.	240 .. ..	—	Free ..	350
United Cement Company.	Provide quarters	—	Free ..	150
Burn and Company..	Provide houses..	—	—	100
Perfect Pottery Works, Jubbulpore.	Brick built rooms	—	Free ..	500
Katni Cement Company.	150 quarters ..	—	Free ..	200

4. There is practically no information except for a few shellac factories, where imported labour is provided with free quarters.

*APPENDIX V.*  
*Statement of Accidents from 1924 to 1928.*

Serial No.	Classification of industry.	Total number of accidents in 5 years.				Incidence of accidents per 100 persons of average daily employees.				
		Due to moving machinery	Due to fall of persons or objects or flying chips.	Caused by fire, electricity or chemicals.	Miscellaneous including transport.	1924.	1925.	1926.	1927.	1928.
1	Spinning and weaving mills	239 <sup>2</sup>	65 <sup>2</sup>	13	65 <sup>1</sup>	Per cent. 0.40	Per cent. 0.38	Per cent. 0.46	Per cent. 0.44	Per cent. 0.33
2	Motor works	—	4	1	5	0.84	1.72	0.98	2.54	2.20
3	Electric power house	—	4	1	—	3.85	5.0	—	—	0.64
4	General engineering	3	3	—	1	1.21	1.25	0.42	—	—
5	Railway workshop	27	96 <sup>1</sup>	7	61	2.11	3.86	2.63	3.53	5.86
6	Tramway works	—	—	—	—	—	—	—	—	—
7	Distilleries	—	—	1	—	—	0.70	—	—	—
8	Flour mills	—	—	—	—	—	—	—	—	—
9	Ice factories	—	—	—	—	—	—	—	—	—
10	Rice mills	2	1 <sup>1</sup>	1	—	—	—	—	—	3.33
11	Water pumping stations	—	1	—	—	—	—	—	—	0.34
12	Dye works	—	—	—	—	—	—	—	—	—
13	Gas works	—	—	—	—	—	—	—	—	—
14	Oil mills	21 <sup>1</sup>	1	1 <sup>1</sup>	1	0.56	1.36	1.20	1.07	0.56
15	Match factories	—	—	1	—	—	—	—	0.41	—
16	Paint works	—	—	—	1	—	—	1.43	—	—
17	Printing presses	2	—	—	—	—	—	—	—	0.33
18	Brick and tile works	—	—	—	—	—	—	—	—	—
19	Cement works and potteries	47 <sup>3</sup>	24 <sup>1</sup>	27 <sup>2</sup>	21 <sup>3</sup>	0.94	0.81	0.82	1.22	1.08
20	Glass works	—	—	—	—	—	—	—	—	—
21	Saw mills	2	3	—	—	—	—	4.88	—	5.66
22	Forge press	—	—	—	—	—	—	—	—	—
23	Ordnance factories	86	198 <sup>1</sup>	24	96 <sup>1</sup>	4.70	2.62	2.77	3.96	4.41
24	Ginning and pressing factories	109 <sup>2</sup>	33 <sup>4</sup>	22 <sup>1</sup>	55 <sup>2</sup>	0.10	0.138	0.072	0.09	0.137
25	Miscellaneous	—	—	—	—	—	—	—	—	—

*Note.*—Indices in small numbers give the number of accidents that resulted fatally.

HARI KRISHNA AGRAWAL M.A., MANAGER. THE AKOLA COTTON MILLS, LTD., AKOLA (BERAR).

### Introductory Remarks.

The root cause of the present state of things in Indian industry is the apathy of the average shareholder. He does not take sufficient interest in what belongs to him. If he were to take enlightened interest in the factory, the managing agents would be compelled to take more interest, or curtail their enterprise by managing only those concerns which they own. In both cases efficiency would result. Why some of the mills do not flourish and others do, may to some extent be accounted for by the fact, that the men in authority in the former, are manufacturers, while in the others, they are not. In the case of manufacturers, industry is their principal line of business, while in the case of others it is only a side line. If the managing agents happen to be industrialists, their mills get more attention and consequently the problems of their factories are better appreciated, defects quickly detected and promptly remedied, enterprises courageously undertaken, and modifications needed owing to the change of circumstances introduced without ruinous delays. On the other hand, if the industry happens to be only a side line of the managing agents who are engaged in larger commercial enterprise they look on their mills as a shop which yields them or loses them so many thousands a month. Profit and loss statement is the only paper which interests them. All the defects of absentee landlordism are repeated with this modification, however, that industry to some extent provides an automatic check by way of competition. Pride in the product is absent. The sense of service to the community through industry is totally unthought of. On the other hand, these absentee agents, alone seem to have enough capital to keep the industry going. The experiment of running a cotton mill by other organizations more democratic in nature has yet to be tried.

For remedy, I would suggest that a small central committee consisting of representatives of departmental officers, managers, salesmen and agents, should visit every mill and discuss improvements and make confidential reports to the agents and management. The object is to pool the knowledge we have and to make the officers and agents create a public opinion of their own and live in it. This is bound to have a salutary effect. I consider this as a very important step in the right direction.

### II. Staff Organization.

10. There are workmen and women workers, who are directed and controlled by jobbers and naikins. These in their turn work under a head jobber who is controlled by the heads of the departments and their assistants. The heads of the departments are accountable to the manager, who is responsible to the managing agents.

The above is the organization for the technical side. Side by side with this organization is the control exercised by the office. Each department has got two clerks, who keep accounts of the movements of goods, stores, attendance and out turn. They are under a head clerk, who is controlled by the secretary or the manager as the case may be.

Our present heads of department have practically all risen from the ranks.

The weaving master, Mr. Jaduram Bhatt started life as a sizer on Rs. 40 p.m. (or thereabout). He is now drawing Rs. 500. This very month the agents have accepted the recommendation of the management in part and, given him a promotion of Rs. 50.

The spinning master, Mr. Patel started life as a fitter. He does not know much English, but knows his work thoroughly. The present head of the dyeing department started as a coolie. The engineer, Mr. Damle also began as an unpaid fitter, but passed his examinations subsequently after 3½ years.

The improvements suggested by us are :—(a) A larger number of graded examinations for millworkers to be held every 3 months. They should be in sections, or compartments ; (b) Publication of technical handbooks in Hindi and Marathi. In Gujerati, there are already some in existence ; (c) Conferences, meetings of technical men and on technical matters, should be organized ; (d) Vernacular technical journals should be also published ; (e) Another point of much importance is that just now, clerks, officers and other skilled men may as often be discharged for their incompetency as for the personal whims of the discharging authority.

A system of transfers through a central organization may have a certain amount of check. The discontented worker and manager may both keep this central organization informed of their desire for change and this organization may arrange the transfers. After three continuous complaints it will be quite apparent, which

party is more to blame, e.g., if a certain officer or clerk, is complained against, by three successive mill managers, he may be sent away to shift for himself. On the other hand if these men already working in other mills do not suit a mill manager, he needs a revision of his policy towards his inferiors.

I therefore respectfully suggest, that if the above method is adopted, skilled men will get what they prize most, viz., security of tenure and the management will get what it wants, viz., experienced hands.

The system of transfers like others is not without some disadvantages. The employee, for instance, may not prefer the new environment, but I submit it will be a little better than "no employment." It has also its compensating advantages. Changes in two or three mills will make the employee a fitter person to work than otherwise.

There are certainly, even during the present time, facilities for promotion of deserving workmen as is proved by numerous instances of men having risen from a workman to the highest position, but these are all, instances of men who have pushed themselves up, and acquired training as they climbed. It must be admitted that tact, capacity to impress others and social influences have also played their part rather than appreciation of sheer technical ability. Facilities, as such, there are none.

13. The relations between staff and rank and file are sometimes good and sometimes bad. Seventy-five per cent. of the ill-will against the staff can be cleared off if the aims of the latter can be made plain to the rank and file. More publicity would mean better relations. Indian mills are woefully under officered and the workmen are illiterate. Under these circumstances very little can be done.

The efficient working of democratic institutions rests on the intelligent individual interest. Such interest is kept up by means of press and platform. Illiteracy seals up both these interest awakening agencies. Press becomes too far, and platform too high.

In this mill a sort of work council in the weaving department was attempted by nominating 12 jobbers and getting 12 weavers elected, one from each line. The head jobber, the weaving master and manager attended the meetings. The weavers were openly and definitely guaranteed against victimization for any complaint they brought. They were also told not to discuss personalities, but to present their difficulties. These meetings were held and it was an education not only to us, the officers, but to the workers themselves, for when we replied to their complaints they began to see that the fault did not always lie with the cussedness of the management but with slackness or absence of some of their fellow workmen. But after a time the interest slackened and we dropped it.

14. The wages are paid by clerks and cashiers. A good deal of time is wasted by the workers surrounding the paying staff, in spite of arrangements to the contrary.

15. That job is generally given to contractors over which the management discovers its inability to control. It seems therefore most unfair to hold the management responsible for the acts of contractors.

Contract of only building work or some extraordinary item is given.

### III.—Housing.

16. (i) About 325 rooms are provided in my mill for the workers by the managing agents. Rent is from Annas 4 to Annas 8. These rooms can fetch Rs. 3 per month, if treated without concession.

(ii) Nil.

(iii) There are several, but the condition is very bad.

(iv) There are some rich workers who own houses.

17. None that I am aware of.

18. (i) Good.

(ii) Unsatisfactory though better than others.

(iii) Two large kitson lamps are provided giving light in the compound but none in the rooms. Sanitary latrines are provided. Good well-water is provided. About Rs. 15,000 were spent in digging the well. Pucca drainage has been built recently.

19. The utilization is full, if the employers were to double the accommodation the same would be utilized within a month. There is always a scramble for these rooms.

20. Annas 4, Annas 4 and Annas 8 for katcha, partly katcha and pucca.

21. They do sublet their rooms in their occupation to workers in other employ on the pretext of relationship. There is always difficulty in eviction.

22. I think the moral effect of chawls has been most disastrous. It is quite alien to Indian conditions and should not be encouraged at all unless the factory is situate in a place where no accommodation is available. I am quite aware of the conveniences which the labourers and employers get by industrial housing but in my opinion, the social and moral disadvantages far outweigh these. The workers talk shop, their ideas begin to run in a groove. Good families are, so to say, forcibly surrounded by families of evil traditions and become intemperate and immoral. Conditions become such that physically weak, unaggressive, friendless families are totally helpless against others of the opposite type.

Instead of forcing employers to build chawls for their workers, I would lay this burden on the shoulders of municipalities. Of course the employers would be made to contribute heavily in proportion to the number of their workers.

#### IV.—Health.

23. The general health condition of workers is not good though it does not compare unfavourably with labourers of their status in ordinary employ.

(iv) Juar mostly and some vegetable—Muhammedans and some classes take meat. The average worker does not spend proportionately on his diet and allows himself to be under nourished.

(vi) The disruption of family life has a most disastrous effect. Bad housing not only means bad health and inefficiency but it means bad morality. If the worker cannot keep his family, the restraining effect is gone and he deteriorates.

24. (i) Captain Apte, M.B.B.S., (part time) is in charge of the dispensary, assisted by a whole time compounder. The employers freely pay for medicines and injections.

(iv) The Red Cross society sends a nurse every week to look after the babies and she is doing good work. There is no other provision under this head by any agency.

25. They are fully utilized by both sexes. To what extent women patients do not avail themselves of the medical help offered I am unable to say.

26. (i) Sanitary latrines are provided, satisfactory both in numbers and construction.

(ii) Adequate well-water is provided.

(ii) The same. The management is building a tank to store bleaching water for washing purposes of the workers and hope to get the same ready in a month.

29. (ii) Cholera and malaria are widely prevalent. Malaria is sapping the vitality of the whole race and I consider it to be the greatest problem in India in all spheres, without a single exception.

30. Some of these benefits are difficult to introduce for want of literacy. Illiteracy is the stumbling block in all directions of reform.

(iii) There is very little prejudice left about the non-acceptability of western medicine. It is however, indisputable that Ayurvedic and Unani systems in certain diseases and at certain stages and to some patients are far more effective than Allopathic system as the last is superior to the other two, in others. Some old religious minded persons excepted, it is preposterous to suppose that the bulk of the patients refuse to accept what they see is doing tangible and immediate good.

*Paucity of Medical men.*—Government should freely train in very large numbers, compounders, nurses and midwives. Vaid, Hakims and Homeopaths. All these systems have been found to be doing good, and to be superior or inferior to each other in some respects and only a blind partizan would like to retain one, and wipe the rest out.

31. (i) Six weeks full wages are paid to every woman worker during the period preceding delivery. The expectant mother is required to put in only 8 months' service previous to claiming the maternity benefit. She is not compelled to rejoin work if she does not choose to do so.

#### V.—Welfare.

Maternity benefit as above described.

A baby creche is maintained at the mill expense. Free milk and sugar are provided for babies. Two nurses are in charge.

Free primary school is maintained.

Footballs have been given for play.

33. I am in favour of employment of such officers and workers. In fact trained and wholtime workers are wanted. Mill officers have very little time to spare.

36. One school. Not fully utilized.



37. Yes, it is most desirable. A scheme of provident fund should be introduced. The turnover is very great and hence it should be transferable from one mill to the other as well.

38. Very much in favour, but see little possibility of success till literacy is more widespread.

#### VI.—Education.

40. A system which combines recreation with education has alone chances of success. The other systems scare away attendance. Scouting, cultural films, organized games should have precedence over schools.

41. There are none. Trade schools are the need of the hour. The points that have to be kept in mind are that they must be conducted in vernacular and that they must be sectional. Courses must be short and able to meet a definite need and within that limit quite thorough.

This training can only be attempted by Government.

42. The present system of education is altogether one sided. It lays too much stress on knowing and very little on doing; still an educated man though he has some disadvantages has still overwhelming advantages against the uneducated. But if education is combined with practical work, nothing can beat the combination.

#### VIII.—Workmen's Compensation.

51 and 54. Compulsory insurance with indigenous companies should be introduced. But after the company is insured, the management should be free from botherations regarding the actual fixing of the amount of compensation.

#### IX.—Hours.

55. (i) 10 hours and 9½ hours.

(ii) The overtime is very seldom given to workmen. It is confined to less than 5 per cent. of workmen, e.g., jobber fitters, etc. Fitters work only 9½ hours every day.

(iii) About 7½ hours of actual work on the average.

56. Six days.

57. (i) good.

(ii) Good. The output in two of the mills whose past and present figures of output I possess, actually improved after the introduction of 10 hours rule.

58. Salutory.

59. Yes. There is the possibility of a reduction provided training is given to workers. We can easily reduce the number to eight hours per day.

The workers, I find, taking meals at almost all hours of the day. They generally take meals during the working hours and rest during the stoppage interval.

(ii) Very little discretion is allowed to the factory inspector for exceptional cases. The law may remain the same but it should be less rigidly administered. If the engine is kept stopped, permission of overtime for some small section not exceeding 10 per cent. may freely be given. Such work is in the interest of the industry as well as the workers themselves.

(iii) The mill works from 7 to 12 and from 1 to 6.

The holidays are few and far between. However, this a world question and cannot be taken by one country alone on account of severe competition in the world market.

For example, if I had a voice in the International Labour Organization I would demand a month's leave for every worker on full pay without the option of its being converted into cash. Money can be no substitute for rest and change.

A psychological factor of strikes is the monotony of working 10 hours day after day, month after month. No wonder that the worker at some time is in the mood of change at any cost. There is a world of difference between the mood of a person before and after his annual vacation. What about those who don't get any?

82. We house the infants in a separate shed in charge of two nurses. Women of the reeling department where no power driven machinery is working are allowed to take infants with them.

84. The regulations are all right, but some times they are wrongly administered by European medical officers who judge the age of the boy by his height and build. On questioning, I found that they had English standards which were not at all applicable to India much less to the labouring classes who are ill-nourished and consequently less in height.

105. I do not think any good can come out of fixing minimum wages.
106. (i) It is very little, e.g., about Rs. 52 on a pay roll of Rs. 29,000.  
 (iii) The fines are spent for the benefit of the workers.  
 (iv) If the power of fines is taken away dismissals will be more frequent.

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 PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

### I.—Recruitment.

The following replies refer to the recruitment of departmental labour for the construction of the Kharung and Maniari projects in the Hasdeo Circle. These are the only works for which labour has been recruited departmentally on a large scale during the last few years :—

2. (i) Generally local labour only is engaged and employed by contractors and labour recruited from any distance is employed departmentally. The extent to which labour has been recruited departmentally in recent years for the construction of the Kharung and Maniari Reservoirs and canals in the Bilaspur district is as follows :—

Year.	No. of labourers recruited who arrived at the site of works.			
1924-25	..	..	..	2,714
1925-26	..	..	..	3,121
1926-27	..	..	..	7,006
1927-28	..	..	..	8,601

Most of the labourers are engaged for a period of about 5 months during the year (January-May) and return to their villages during the kharif season (June-December) but a certain proportion of the labourers, those who own no land of their own, remain at work throughout the year. At the Maniari dam about 1,800 labourers have remained during the present rains.

(ii) Local labour is engaged annually on the maintenance and repairs of irrigation works, but such labour is mainly dependant for a livelihood on agriculture and undertakes work for the department merely as a subsidiary occupation. Practically no labour is employed permanently by the department.

3. (i) Paragraphs 289 to 301 of the Central Provinces Public Works Department, Manual of Orders, Volume 1, as amended by amendment No. 237, contain the rules for the recruitment of labour departmentally and its employment, and explain the methods of recruitment. Advances are granted to labour recruited from a distance ; the usual amounts of advances are Rs. 5 per adult and Rs. 3 per child. The amount of these advances is recovered by instalments from wages earned.

### II.—Staff Organization.

13. (i) Labourers are usually more ready to accept employment departmentally than from a contractor, since as a rule they believe that they will obtain fairer treatment from the staff of the department than from a contractor. The fact that the labourers have returned to work in increasing numbers from year to year indicates that they have been fairly treated by the staff of the department and are satisfied.

14. (i) Attendance registers are kept and measurements of piecework are made by the subordinates of the department, and their work is supervised by officers of the department.

(ii) The labourers are paid by selected subordinates of the department under the direct supervision of the Sub-Divisional Officer who is a gazetted officer.

16. (ii) On arrival at the site of work, labourers recruited from a distance are given two days' pay to enable them to construct huts from materials which they are allowed to obtain free of charge from the forest near the work. Where, however, materials for the construction of huts have already been collected at the site of the labour camps only one day's pay is given as hutting allowance.

24. (ii) A dispensary is opened by Government at large labour camps—usually at the headworks of a canal. The sub-assistant surgeon in charge visits other labour camps and medical attendance and medicines are provided free of charge to all labourers.

34. (iii) Where local supplies of rice or fuel are insufficient, or when it appears that prices are likely to be inflated to an unreasonable extent, the department opens depots for the sale of these commodities at approximately cost price, and this has a controlling effect on the local market rates.

## XII.—Wages.

96. Labour is, as far as possible, paid on the piece-work system, and the average wages earned are roughly 6 annas per man, and 4 annas per woman as compared with the normal rates of 4 to 5 annas for men and 3 to 3½ annas for women.

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MAJOR C. M. GANAPATHY, I.M.S., OFFG. DIRECTOR OF PUBLIC HEALTH,  
CENTRAL PROVINCES.

*Note on sanitation and housing, welfare and health conditions of labour in the mills,  
factories and mines of Central Provinces and Berar.*

*Sanitary conditions—Textile mills.*—In these the sanitary conditions are better than those obtaining in the houses of the workers. Sanitary latrines and urinals are provided in all the mills. Ventilation is generally satisfactory and lighting good. Supply of drinking water is maintained, which, though not filtered, care is taken that it is not polluted. Temperature inside the mills is kept as far as possible uniform, and is not liable to sudden atmospheric fluctuations.

*Factories.*—The same, however, cannot be said of the factories. The perennial factories approximate the condition of the textile mills, but the seasonal ones are generally dirty. Ventilation, too, is not adequate to cope with the dust generated during the manufacturing processes as there is no satisfactory arrangement for its removal. Lighting is satisfactory. In many concerns the alleys and corners which were dark are now lighted by the introduction of electricity.

There are a number of factories which do not come under the definition of "factory" according to the Indian Factories Act. The sanitary condition in these factories is still worse and little attention is paid to it. Bidi and shellac factories can be taken as conspicuous examples of this class. In bidi factories there is considerable overcrowding, and no regard is paid to light and ventilation arrangements. The shellac factories on the other hand emit very offensive odour, due to lack of adequate washing and drainage. The waste water is allowed to stagnate at the back and sides of the buildings, giving out a most offensive odour. In Bhattagarh there are several fireplaces for melting shellac, and this room gets considerably overheated, which cannot but have a harmful effect on the labourers working there. The application of the Factory Act would no doubt improve these establishments.

*Manganese mines and quarries.*—These are usually open air undertakings, and hence the sanitary arrangements are generally good. If underground, ventilating shafts are sunk at every 100 feet or so.

*Coal mines.*—Here also there is both surface and underground work. The surface work being carried out in the open air, the question of light and ventilation is not important. For the underground work, provision for fresh air is made by ventilation shafts. Artificial lighting has to be resorted to.

*Housing conditions.*—In most of the textile mills, housing is provided for a certain number of mill hands with their families. Each labourer is allowed one room with a small verandah or an open space just in front. The size of the room is from 8 feet by 6 feet to 10 feet by 8 feet, with a door and a small window. There is no arrangement for cross ventilation. Though the window is provided, it is usually kept closed and little advantage is taken of it as it is not placed over a man's height. It will certainly be an advantage if ventilators are provided near the ceiling with an eye to cross ventilation. The room is used for all purposes, cooking, bedroom, store room and even a delivery room. All the belongings are stacked inside. The room is sometimes shared by two brothers or some other relatives or friends of the mill-hand, and no privacy is usually observed. Common latrines are provided for each chawl. In a town having waterworks, a common water stand is provided, but where there is no such arrangement, water is obtained from a well constructed by the mill authorities.

Those who do not occupy the rooms provided by the mills build their own huts in the bastis or files by paying some ground rent or sharing some rented room with others. Such files are numerous in big industrial towns. In these files the labourers

reside in groups of anywhere from fifty to five hundred houses. The huts constructed by the labourers usually have no provision for light and ventilation. The sanitation is looked after by the municipality of that town. Generally there is no private latrine. Either the open fields are made use of or municipal public latrines are patronized. One or more public hydrants or standpipes are provided by the municipal authorities maintaining waterworks, otherwise drinking water is obtained from a public well close by.

Housing problem has been systematically tackled by the Empress Mills, and a model village is being developed for their employees near the Indora basti.

*Factories.*—Some of the perennial factories provide housing for a certain section of their labour force, but in the seasonal factories no such arrangement is made except for a few mechanics. The labourers reside in the files, the condition of which is the same as that described under the textile mills.

*Mines.*—In quarries and small mines the number of labourers employed is small, and they reside in the surrounding villages. They come to work in the mornings and return to their houses in the evenings.

In larger mines, where the labourers coming from distant villages are employed, the mining authorities have constructed permanent burnt brick houses for their labourers. Each family has a well ventilated quarter with a verandah. Most of these quarters are in blocks of not more than four quarters per block.

*Welfare work.*—In Nagpur, welfare work for the benefit of labourers employed in the Empress mills is done (a) inside the mill compound by the Empress mill authorities and (b) outside in the bastis by the Y.M.C.A.

At other places in the province no welfare work is undertaken in the bastis or files. Schools are, however, maintained for the benefit of half-timers either by the mill authorities themselves or by the municipal committees with the aid of the mill authorities.

*Creches.*—Seven textile mills in the province provide creches and about 230 babies are reported to have been cared for daily. These creches are under the supervision of a lady doctor and nurses, as in the case of Empress mills or ayas or old women in other mills. As the law does not make the provision of creches compulsory, the example has not been copied in all the mills.

The factories as a rule do not employ a large amount of female labour, and hence the question of providing creches has not made much progress.

In two or three big mines, arrangement has been made to look after the toddlers while the mothers are working.

*Maternity benefits.*—Four textile mills and one factory (pottery works) grant maternity benefits. The amount granted differs at different places, varying from three to eight weeks' wages at the time of confinement. During the year 1928, 292 women received these benefits against 286 in 1927.

*Infant welfare centres.*—No infant welfare centres are maintained by the mills or factories. A certain amount of work in this direction is done in the creches described above. The infant welfare centres (run under the joint auspices of the Child Welfare Committee of the Red Cross Society and the local bodies) in Nagpur and other towns are located in or near the basti where a large number of labourers reside.

An infant welfare centre has recently been opened at one of the manganese mines and it is likely that one more will be opened shortly in one of the coal mines.

*Medical facilities.*—Thirteen perennial factories maintained dispensaries with qualified medical officers in charge, while others kept first aid appliances and a few medicines for emergencies. At certain places grants are given to local dispensaries with whom they make arrangements for the treatment of the employees. Seasonal factories do not see any necessity for having a dispensary of their own. The total number of patients treated in 13 perennial factories maintaining dispensaries was 186,634 during the year 1928.

Some important mines have maintained dispensaries, with one or two rooms attached for indoor patients, in charge of a qualified medical officer.

At some of the smaller mines, a stock of simple remedies is kept, and this is distributed free of charge.

*Industrial diseases.*—There is no record of any industrial diseases in this province, but there can be very little doubt that diseases such as dust asthma, bronchitis and tuberculosis must be prevalent in the cotton industrial centres. Figures supplied by the Empress mills show that about 5 per cent. of the cases treated in their dispensaries were for the diseases of the respiratory system.

*Predominant diseases affecting the labour.*—No statistics for these are available. The labouring class is usually dirty, and again has to work under unfavourable circumstances which lead to scabies, ringworm and such other skin diseases. This

can be seen from the cases treated at the Empress mill dispensaries, where 21.74 per cent. of the total treated in 1928 were for the diseases of the skin. It is reported that pneumonia is more prevalent among the underground workers during the cold season, as it is just possible that on coming out of the mine, which is generally warm, contact with the cold surface air causes chill leading to this disease.

*Hookworm and other worms.*—In 1921 the Local Government appointed a special officer to carry out investigations regarding the prevalence of hookworm infection among the labourers employed in the mills and mines of this province. This officer examined 6,740 labourers, which represented the average daily attendance in the Empress mills, and found that 714 or 10.59 per cent. were infected with hookworms, and 1,417 or 21.02 per cent. with roundworms. In 1922, 58 labourers in Barwelli manganese mines (Balaghat district) were examined, with the result that 13 or 22.41 per cent. of them were found infected with hookworms. Preliminary investigations carried in Ballarpur coal mines showed that 75 per cent. of the labourers were infected with this worm.

*Children employed in the mills and factories.*—In the textile mills children are employed as half-timers, but the stringency of factory law is gradually reducing the number. Other factories employ them sparingly. The total number of children employed per day in mills and factories was 1,439 in 1928, against 2,183 in 1921. The number of children attending primary school attached to factories was 651 during the year 1928.

## THE BIDEE FACTORY LABOURERS OF THE CENTRAL PROVINCES AND BERAR.

On behalf of the Bidee factory labourers of the Central Provinces and Berar we beg to submit the following for the kind and favourable consideration of the chairman and the members of the Commission.

*Bidi Factories and the Labourers.*—In the Central Provinces and Berar there is a great manufacturing business of bidees, and thousands of labourers of both sexes, even children, earn their livelihood by attending these factories, which are located in the towns as well as in the villages. Almost all the bidi labourers, with a few exceptions, belong to the so-called depressed classes.

*The Daily Routine of a Labourer.*—The specified material such as leaves, tobacco and thread, are given to them at every factory, and in some factories they have to buy thread. Each labourer brings to his home the leaves and soaks them in water. After being soaked, the person cuts each leaf symmetrically by means of scissors. The cutting of the leaves is carried on generally till midnight, and the balance is cut by getting up very early in the morning, as each labourer has to attend the factory before noon. In the factory he makes bidees for the whole day, packs them in bundles of 25 each. These packed bundles are handed over to the manager of the factory. Owing to incessant laborious work and to the anxiety of next day's call the labourer never sleeps in peace.

*The Rate of Wages.*—The rate of wages per thousand bidees varies from 4 annas to 11 annas according to the "finish." These rates are not stationary for all seasons. During the winter and summer the rate remains more or less normal, but in the rainy season it is lowered.

*The Average Wages per Head per Day.*—The average rate of bidee-making per day per labourer is less than a thousand. The labourer in some way or other maintains his soul and body together with the greatest difficulty by the scanty daily wages, and each labourer is a debtor owing to insufficiency of wages.

*Cuts in the Wages.*—Before paying wages to a labourer, a certain amount of money is deducted from his scanty wages to recover the loss in the less number of bidees made out of the specified tobacco and leaves. Occasionally the labourer is not paid for the whole or part of the bidees for the reason that they have not been prepared to satisfy the sorter's wish.

*Sorting and Dharmadaya, i.e., Charity Fund.*—There is a special rule in some factories that while sorting, one or two bundles of bidees are obtained for every thousand bidees or its fraction (this is unreasonable). In the same way 3 or 6 pies for every rupee wages or its fraction are recovered or deducted as a charity fund before payment of wages is made. This obtained fund "the sorting as well as the charity fund" are never utilized for the betterment of the labourers, but this money is spent according to the will of the manufacturers. Only in rare cases the money is utilized in sarais, temples or in such other purposes, and the majority of the labourers being of depressed classes derive no benefits from money spent as the untouchability is in existence.

*The Condition of the Female Labourers.*—In most of the factories the females have no separate accommodation, and males and females sit side by side. Generally the females are belated up to 7 or 8 in the night for receiving their ready made bidees and issuing them leaves. The chastity of the female employee working in the factories is always in danger. Only a few female labourers are allowed occasionally to make bidees at their homes on reduced rates.

*Behaviour between the Labourers and their Superiors.*—Maltreatment is always exercised upon the poor labourers even for trifling matters, and uneducated labourers or female labourers never get his or her weekly wages fairly.

*Owners Discretion towards the Labourers.*—The Juvenile Factory Act not being applied to the bidi factories, children of the age of five even work in the bidi factories. Owing to this encumbrance the bidee labourers are backward in education. The owners of the factories never pay attention to their improvement of health or living and never give facilities for education.

*Labourers Encumbrances.*—The bidee labourers being absorbed in making bidees only, become unfit for other labour or work, hence when most of the factories close in the rainy season these labourers experience many hardships. When the labourers are ill or when the female labourers are confined they do not get any wages for the period. Once in a week, when the factory is closed for a full day or half a day on account of bazaar day, the labourers do not get any wages. The labourers take food in the morning and do not go home during the whole day for fear that they will have less ready-made bidees to give. The labourers carry out their work at home and in the factories by sitting on the floor.

*Demands of the Labourers.*—(1) The Factory Act should be applied to the bidee factories.

(2) The rate of bidee-making should be legalized so as to be uniform for all seasons, and this rate should be according to profits, but in any case not less than 9 annas per thousand.

(3) The sorting of one or two bundles of bidees and charity deductions (fund) should be stopped.

(4) The female labourers should not be allowed to stay in the factories after 5.30 in the evening, and the factories should be closed at a fixed time every day.

(5) The female labourers should have separate accommodation from males.

(6) Every precaution and judicious arrangement should be carried on to maintain the chastity of every woman labourer, otherwise female labourers should be allowed to make bidees at their homes at the same rates.

(7) Provision should be made so that every female labourer should get one month's wages during confinement.

(8) Female managers should be engaged specifically for female labourers to transact with them.

(9) Qualified nurses should be at service for obtaining facilities for the infant welfare.

(10) Schools should be established for imparting compulsory education to the labourers for at least one hour in the day. Ayurvedic dispensaries should be opened and a useful kind of library should be maintained for them.

Sir SORABJI B. MEHTA, C.I.E., MANAGER, EMPRESS MILLS, NAGPUR.

The Empress Mills, Nagpur, comprising a group of five mills, began working on the 1st January, 1877, and I have been connected with the mills for the last 39 years. Our mills are cotton spinning and weaving mills, and we have our own up-to-date dye and bleach works. We have also five ginning and pressing factories in centres where cotton purchases are made for us on a large scale. We have on our rolls 8,800 workpeople, consisting of 6,887 men, 1,810 women and 103 half-timer boys. The average daily attendance of our workpeople is 7,500. And we produce annually for sale 98,56,000 lbs. of yarn and 75,31,000 lbs. of cloth.

### I.—Recruitment.

1. We have on our mills' rolls at present about 8,800 workers, including about 1,800 women workers. Our labour population is mostly indigenous with a sprinkling of people from the Chhatisgarh division of the Central Provinces, and from the United

Provinces and Northern India. The Chattisgarhis, who came to Nagpur in some season of famine, having found permanent employment at our mills, have made Nagpur their home. United Provinces and Northern India have been supplying us with our watchmen and our boiler coolies and serangs. Very few of these workers have brought out their families with them, and they always love to go on leave to their distant homes. I am not aware of any particular streams of migration of labour from other provinces to Nagpur, and for the last many years our labour force has remained very much alike, in so far as the races and castes employed are concerned, the majority consisting of Mahars (depressed class people). A statement (enclosure "A") showing the principal castes, etc., of our workpeople is sent herewith.

2. As our workpeople are mostly inhabitants of Nagpur, or have come from the neighbouring villages, the proportion of those going out to their villages on leave is about 10 per cent.

As to the enquiry about the extent of permanent labour force, I may say that the whole of our labour force is permanent.

3. As a rule, we have always had ample local labour. However, many years back we did send out recruiters to import labour, but such imports were only 500 to 600. I am, therefore, not in a position to express any opinion on labour recruitment and its methods, as also on the desirability of establishing public employment agencies.

4. As most of our employees have their families in Nagpur, there is little disturbance of family life among our employees; and as such I have no practical experience of the effects of disturbance of family life.

7. There is a good deal of unemployment in Nagpur, both among skilled and unskilled workers, for our present experience is that we have never had to go seeking men to fill up vacancies, and every fortnight many apply to us in vain for admission.

8. (i) A statement (enclosure "B") showing turnover, since the year 1908, of labour at our mills which have had an existence of over half a century, is sent herewith. Another statement (Enclosure "C"), also sent herewith, gives statistics of periods of service put in by our operatives. It will be found from the latter statement that the average period of continuous service put in by a worker at our mills is 7.89 years.

(ii) Practically no casual labour is employed by us in any of our principal departments, viz., spinning, weaving, dyeing, bleaching and power plants. In our building department, however, labour is mostly casual. For every small job a petty contractor is asked to bring his men to finish it, advances are given to him to make payments to his workers and a final account is made up when the job is finished. I may mention in passing that we have to maintain a building department, having a small permanent staff of civil engineers, overseers, draughtsmen, masons, carpenters and coolies to attend to the repairs and maintenance of the buildings appertaining to our five mills, of our officers' quarters and chawls for clerks and watchmen. The superior building staff also supervises the new construction work.

(iii) (a) and (b) For the extent of absenteeism at our mills, please see statement (enclosure "S") appended to my remarks under sub-heads 57 and 58. The commonest cause of absence is illness of the workers themselves or of their dear ones at home. As, however, we have on our rolls 8,800 workpeople against an average daily attendance of 7,500 which make the full complement of hands needed to run all our mills, absence due to illness does not markedly affect our mills' work as does absence brought about by the marriage and pilgrimage seasons, the former coming off in the months of May and June and the latter in February. In most cases leave is obtained beforehand by the workers for such absence. Another cause of absence, but in this instance of an occasional nature, is the spread in the town of an epidemic.

(c) The average of the percentages of absenteeism for several years among our workers as worked out in my statement (enclosure "S") appended to my remarks under sub-head 57 comes to a little over 16 per cent. The time thus lost by our workers comes to about 58 days a year, and the wages lost in consequence amount to about Rs. 4,05,900.

## II.—Staff Organization.

10. The Central India Spinning, Weaving & Manufacturing Co., Ltd., which own the Empress Mills, are a Joint Stock Company, having their registered office at Bombay. Under the Articles of Association of the Company, it is the Board of Directors that is the ultimate authority to decide important questions relating to the mills; but the board has delegated certain powers to a firm of managing agents, viz., Messrs. Tata, Sons, Ltd., to supervise generally the working of the mills and to make appointments to responsible posts. The appointment of mill manager is made by the managing agents, who have invested him with authority to make appointments of assistant managers, heads of departments, assistants and other members of the

supervising staff. Generally it is the managing agents that make purchases and sales, and arrange for the financing of the business of the company and for effecting the insurance of its property, but due to the mills being situated more than 500 miles away from the head office of the company, and to the implicit faith the managing agents have in their mill manager, they have given him a free hand in the management generally of the mills, and it is he who makes purchases, sales, etc.

11. For filling up managerial and supervising positions, the Empress Mills have a system of taking up and training apprentices. Two types of youths are selected for the purpose, viz., those that have had a good school education, and those that have secured diplomas of technical institutions or university degrees. Unlike most mills where apprentices have to pay premium for being trained or have to work as unpaid employees, our apprentices enjoy an incremental scale of pay during the full five year period of apprenticeship, there being a higher scale for diploma holders and graduates. The kind of training given to both classes of apprentices is alike in all the departments of our mills, and though due to their superior educational equipment graduates usually pick up work much quicker and are put into responsible positions earlier, there have been instances of ambitious young men of ordinary education who, by dint of self-help and hard unremitting toil, have outstripped their brothers with superior initial qualifications.

Up to the 15th April, 1928, we trained 265 apprentices, including 33 graduates. Out of this number, two graduates and six ordinary apprentices died in our service, and 16 graduates and 79 ordinary apprentices are still with us, of whom 62 including 15 graduates occupy responsible positions at our mills. Of the 162 apprentices who left us, 74 joined other concerns on high posts detailed as follows:—13 Mill managers; 18 engineers; 17 carding and spinning masters; nine weaving masters; five dyeing and bleaching masters; four assistant carding masters; six assistant weaving masters; one assistant principal, Government Weaving Institute, Serampore; one textile expert to the Government of Madras.

12. Such of our workpeople as show intelligence and capacity to supervise, are trained up to occupy positions of mukadams, jobbers and foremen. In fact, our present subordinate supervising staff consists of our own men who have risen to these positions, and so far we have had no occasion to import men from outside for these posts. Also such youths as have originally joined the spinning department and wish subsequently to join the weaving department, where the wages are comparatively higher, are allowed to do so.

13. (i) At our mills relations have always been very cordial.

(ii) As mentioned in my remarks under subhead 12, at our mills jobbers are appointed from among our own intelligent men. Our jobbers can dismiss workers under them, but such dismissals never take place without the knowledge and sanction of the departmental head concerned. In other mills, however, jobbers are outsiders whose particular merit is the number of workpeople they can bring with them. In such mills the workpeople are said to be entirely at the mercy of the jobbers, and a number of malpractices generally prevail there.

14. (i) and (ii) At our mills, timekeeping and attendance registers are maintained by a special staff of timekeepers as per procedure explained below.

Every morning as soon as the mills start work, the foremen in charge of the different departments collect attendance tickets from the workers in their respective departments, who have attended the mills, and send the tickets to the timekeeping department. The staff of this department mark "presence" on these tickets and in attendance registers, keep the tickets with them up to 3 p.m., and then deliver them back to the workers of the different departments. If in course of the day an operative takes leave, an intimation in that regard is sent by the foreman of the department concerned to the timekeeper who makes necessary alterations in the ticket and attendance register as per details given as follows:—If leave is taken before 10 a.m., one quarter day's presence is marked; after 10 a.m. but before 2 p.m., one half day's presence is marked; after 2 p.m. but before 5 p.m., three quarter day's presence is marked.

Against the names of those workers who are not on duty, "absence" or "leave," as the case may be, is marked in attendance registers. But so far as entries in the tickets are concerned, if leave is taken by a worker, it is marked in his ticket the same day. In cases, however, of absence due to illness or other domestic reasons or of absence without any reasonable cause, "leave" or "absence," as the case may be, is marked in the ticket of the worker concerned on the day he returns to work.

At the close of the month the entries in the tickets and attendance registers (which are also called pay registers) are compared by the timekeeping staff, rates of wages are entered in the same registers and are checked, and wages are calculated



by them in respect of such of the workers as are paid at fixed rates. All the registers for fixed wage earners are next passed on to the general office where a special staff, maintained for the purpose, check only the evaluations.

As regards piece-work, registers for this class of work are maintained under the direct control of the heads concerned in the departments mentioned in the statement (enclosure "Z") referred to in my remarks under subhead 115 (vi), by the clerks working in these departments. The following procedure explains how these registers are written up.

On each machine, on which a piece-worker is employed, a memo is kept in which the machine number, and in some cases the name and the ticket number of the tenter are written. In the same memo the amount of work done on the machine, or by the tenter, is entered from day to day by a clerk on his usual daily round, or next day when weighing the output. In the event of the tenter being absent, another one has to work in his place on the same machine, in which case the name of this substitute is entered in the memo, or in a special book kept for the purpose, against the date on which he works on the machine in question. Entries as per these memos, or books, are subsequently posted in the registers, wherein a separate account is kept of the work done by each operative or of daily earnings in the case of weavers. At the close of the month, total is taken of the daily work or daily earnings, and all entries therein are checked by another experienced clerk of the department concerned. The registers so completed are then passed on to the timekeeping staff who enter in the pay registers the amount earned in all cases of piece-workers, but where evaluation has to be made by them, the amount of work done and the rate of pay are also entered by them in their register. Figures of wages of piece-workers also are checked in the general office.

When the pay registers are ready, duly checked, the amount earned by each worker as shown in the pay register is entered in his attendance ticket for the month to which the payment relates, and the tickets, so completed and signed by the head timekeeper, are delivered to the workers on the day on which the payment is to be made.

As regards method of payment, I may say that our cashier goes to the different departments with a pay clerk. About 30 to 40 workers of the department concerned are arranged in a queue; and each one presents his pay ticket in turn to the pay clerk. In a book known as "pay book" the month for which payment is made and the name of the department are noted beforehand by the pay clerk, and when the ticket is presented to him, he further notes down the ticket number of each worker and the amount of wages earned by the latter, and passes on the ticket to the cashier. With a view to exercise an additional check in regard to payments made, the cashier is given the assistance of a jobber or mukadam belonging to the department concerned. The amount of pay is, in all cases, given by the cashier, in the first instance, to this jobber or mukadam who, in turn, after counting the money, hands it over to the worker telling him at the same time the amount paid to him.

15. We get the undermentioned works of our mills done by daily labourers engaged by petty contractors :—Loading and unloading of goods at railway station and at mills; clearing of goods from railway station; stacking of bales of cotton, yarn, and cloth in our godowns, and construction of new buildings.

We give advances to the contractors from time to time to enable them to pay their men's wages and the work is supervised by our building and general department staff.

### III.—Housing.

16. We started our mills in the year 1877, with 1,500 workers; and as all these workers were local men and owned houses, the question of providing housing facilities for them did not arise at that time. Nor did we feel any necessity in this regard for about three decades more. Frequent outbreaks of plague in Nagpur, however, affected our labour and compelled us to import some 500–600 workers. To accommodate those outsiders, we built in the year 1909, six chawls, each consisting of 12 rooms at Panchpaoli, a locality about two miles away from the mills, and offered the rooms at a nominal rent of Re. 1 per month. Each room is 10 ft. 8 in. by 10 ft. 8 in., and has a front verandah 6 ft. 6 in. wide as also a back verandah 5 ft. wide, which latter has been enclosed to serve as kitchen and store room. All the imported labourers, for whom these chawls were built, as mentioned above, having left us gradually, the chawls remained unoccupied for some considerable time, more especially as most of our workers, who belonged to Nagpur, did not take to the chawls, and we had consequently to let on the same easy terms 12 of the rooms to the Depressed Class Mission Society. But the ideas of our workers have since been changed and these rooms are now much sought after.

With a view to ensure contented labour, we have been considering, since the year 1918, a scheme for a model village, which will combine in it the best features of village life with up-to-date modern sanitary and other conveniences, where each man could own or rent a cottage for himself. Negotiations were opened with Government in 1919 for a suitable site. For five years a good deal of correspondence was carried on with the Government officials who were pleased to take interest in the scheme. Different sites for locating the village were examined and the terms and conditions on which Government would let us have such plots were considered in consultation with persons having great experience in such work and with the Y.M.C.A., who have been carrying on welfare work in the localities inhabited by the mill employees. In 1923, the idea took practical shape. A plot of land measuring about 200 acres at a distance of about two miles from the mills, in a locality known as Indora, where a considerable number of workpeople live, was selected for the purpose, and a lease of 27 years was entered into with Government on favourable terms in 1925. The whole scheme will require several years for completion, and when completed will cost about Rs. 25,00,000. Most of the houses so far built have been occupied by our workpeople, and more houses will be built when our workpeople have been attracted to the village in sufficient numbers.

The following are some noteworthy features of the model village :—

(i) Each house will stand in its own ground.

(ii) The ordinary plots measure 36 ft. by 53 ft. and nobody will be allowed to build on more than one-third of the space.

(iii) Most houses of workpeople have no latrines or water taps of their own and the occupants make use of public latrines and public water stands. But in our model village each house, whether built by the mills or by the worker, whether a kutchra or a pucca house, will have a latrine and a water tap provided at the mills' expense. These are estimated to cost the mills Rs. 170 per house.

An activated sludge plant for the disposal of the sewage of 400-500 houses is being constructed and will be in working order by the end of this year. More such plants will be put up when further sets of houses are built.

The village has its own water-main brought in at the mills' expense.

(iv) The village will be provided with good roads and lighting.

(v) The village will consist of both pucca and kutchra houses. Only pucca houses will be built by the Company, but the workpeople are at liberty to construct their own houses in accordance with approved designs.

At present only one section of the proposed layout is being developed, and there are 108 houses, of which 42 have been constructed by the company and the rest by the people themselves.

The pucca houses built by the mills have cost Rs. 960, but they are being sold to the workpeople for Rs. 840 only. The houses built by the people themselves range in price from Rs. 300 for an ordinary kutchra dwelling, to Rs. 1,600 for a fairly large pucca house.

The workpeople have been advanced money by the mills to put up their houses. This money is to be paid back in monthly instalments spreading over 5 to 7 years. The rate of interest charged on the loans is 3 per cent. for those paying instalments regularly month by month, 4½ per cent. for those that have missed only one monthly payment in a year, and 6 per cent. for those that have been more irregular in paying back. Some of the pucca houses built by the Company have been sold to the workpeople on condition that the whole value of the house should be paid by the purchaser in a period of 5 years in monthly instalments. No interest is charged on the outstanding balance in this case.

(vi) When the scheme is fully developed, it will accommodate 1,500 houses.

(vii) The number of people living in the settlement at present is 75 families with an average of about five members to a family.

(viii) The residents are encouraged to grow gardens in the open space in their compound. Every facility is given for this.

(ix) Hundreds of trees have been planted in and round about the basti which, in course of time, will make the place both shady and beautiful. The Department of Agriculture of our provinces have very kindly assisted us in this matter.

(x) The village will also eventually have playgrounds, market places and public gardens, and in a central situation a hospital, an institute and residential quarters for the welfare work secretaries. A building has already been constructed to be used for holding a primary school there.

(xi) The terms of occupancy and rules and regulations have been embodied in the Lease Deed with the Government and in the Sub-lease with the people.

The model town is thus an attempt to solve the housing problem of our workpeople. The idea has been to provide detached cottages in a sanitary, clean and well ventilated environment and those that are acquainted with the housing conditions in Nagpur for the poor classes will readily appreciate the necessity of a scheme like this, which in the coming years ought to relieve a great deal of congestion in some parts of the city and provide a satisfactory place of residence for the labour classes.

For members of the staff and their families, well-built modern quarters equipped with electric lights and fans have been provided in the vicinity of the mills, and over 60 families are so accommodated.

There are no houses in Nagpur built especially for the labour classes either by Government or by any public agency.

17. The facilities we have given our workpeople for getting on sub-leases land in our model settlement for building houses of their own are embodied in my remarks under sub-head 16.

In this connection I would refer to two circular letters which the Government of India addressed some years back to local governments on the subject of compulsory acquisition of land for industrial purposes. They are letter No. 593-34-3 of 21st June, 1920, re recommendations of the Industrial Commission in the matter of compulsory acquisition of land for industrial purposes, and letter No. 628 of 12th August, 1920, regarding the proper housing of industrial classes. The Central Provinces government having invited my views on the said two circular letters, I had given my views per my letters No. 667 of 11th August, 1920 and No. 1587 of 7th October, 1920, to them, strongly supporting the necessity of an amendment of the Land Acquisition Act. In my second letter I had said, "I am afraid the question of the housing of industrial labour would be perennially discussed and as often be put aside for future and further consideration, unless Government provided the necessary motive power to bring the question out of the realm of discussion into that of practical work by enacting the necessary legislation. I think the Government should announce how much of the financial burden incidental to any housing scheme would be borne by them, how much they expect the large employer of labour to share, and what proportion they think local bodies should share." I regret to say Government has taken no definite action in the matter yet, and however much employers of labour might be anxious to do their bit to solve the problem of the housing of industrial labour, they can do very little for want of the necessary legislation. To illustrate my point I would mention that prior to our model settlement for our employees having been fixed up where it now is, we had looked out in other directions for land for the purpose, and every owner of land demanded of us a very fancy price. And our acquisition of the present site of our model settlement is due to a fortuitous circumstance. The said site had been acquired by the Government for locating the Nagpur University there, but subsequently the idea of locating the university there was abandoned and the Government let us have the land on lease for a very moderate price as it lay on their hands.

20. Workpeople are charged Re. 1 to Rs. 3 per month for rent, while clerks and the subordinate staff pay from Rs. 6 to Rs. 12 per month for the quarters they occupy. Officers are given rent-free quarters.

21. We do not allow any sub-letting of quarters provided by us to our employees ; nor do we allow any but our own employees to occupy our quarters.

#### IV.—Health.

23. From figures of deaths among our workpeople I can say that the average mortality per year among our labour population comes to seven per thousand. I regret, I am not in a position to give figures of birth rate and infant mortality among the whole of our labour population, as such statistics are not recorded at the mills. In connection, however, with the Maternity Benefit Scheme for our women employees we have been regularly keeping for some years past, record of births of infants and deaths among them occurring within two months after birth ; and I append to this a statement (Enclosure " J ") giving these particulars for the last five years.

As for working conditions at our mills, we have always been ahead of the times, in that we introduced measures for the safety and well-being of our employees long in advance of regulations made by the Government in this regard through the channel of the different Indian Factories Acts. Our workpeople have plentiful supply of pure drinking water passed through costly Berkfield filters. Septic tanks and flush type latrines ensure sanitation of the factory premises. We have also adopted a number of devices to provide for our workers, both at our mills and our ginning factories, a comfortable atmosphere to work in. A brief description given below of these devices will not be out of place.

In every spinning and weaving shed the air is renewed about 10 times per hour by means of a number of fans ; and ventilating venetians on the top of the roof effect the exit of the air replaced by the air drawn in. Then water jets placed at suitable distances in underground tunnels running through the departments, with an air propeller at the mouth of each tunnel and perforations in wooden planks placed flush over the tunnels, enable fresh air to be admitted into the rooms constantly humidified as required, the humid air arising from the floor up to the machines and the material in process and filling the room up to the roof. This humidification system provides a comfortable atmosphere for the workers in the departments, as it brings down the temperature by about 30 degrees in the hot months of the year when the thermometer generally goes up to 112 degrees in the shade and at times as high as 116 degrees.

The dust removing apparatus at our ginning factories consists of an exhaust fan at the end of a system of pipes suspended from the roof over the gins, the tops of which are covered by means of hoods made of galvanized sheets, with an opening on one side for feeding cotton. The draught created by the fan sucks the air through the openings in the hoods over the gins and carries away all the dirt and the dust immediately they are produced. The outlet of the fan is connected to a large wooden box perforated with a large number of holes which are covered with hessian cloth to arrest the heavier impurities. It has been noticed that at the end of a week of 60 working hours as much as 146 lbs. of impurities has been collected in the box. Before the installation of the apparatus the workpeople had to put paddings of cloth against their mouths and noses to prevent breathing in the impurities which floated in the air and they always took the first opportunity to move out in the fresh air. All this disappeared after the apparatus was installed, as the whole atmosphere within remained as fresh as that outside.

The dust removing apparatus referred to above has appealed very much to the factory inspectors and they strongly recommend other factory owners in our provinces to adopt it in their factories. Even factory inspectors of other provinces have asked for full particulars of the apparatus and we have gladly furnished same to them.

The vacuum stripping apparatus installed at our No. 3 and No. 5 mills has done away with the stripping of cards with brushes which used before to fill the card-rooms with fluff. This apparatus has ensured better working conditions in the card-rooms.

Runways and rail tracks put in departments, where heavy materials have to be lifted or moved, have helped to save as much manual labour as possible.

The existing homes of the labour classes leave much to be desired, and it is with the object of providing sanitary homes in healthy surroundings that we are on with the execution of our scheme of model village for our employees, referred to in sub-head (16).

As for the dietary and the physique of our workpeople, I can say that so far as the physique of the average worker at our mills has been observed, it is fairly strong and as such the dietary of the average worker must be what it ought to be to maintain the body in health and activity.

So far as I am aware, there is no disturbance of the sex ratio among our workpeople, as most of them have their families with them. However, venereal diseases are found among our workpeople. But only a few cases come to our dispensaries, as from a sense of shame the workpeople get themselves privately treated, and it is only when the disease become virulent that they see the mills' doctors.

24 and 25. At Nagpur, free medical aid is available for our labour classes at our mills' dispensaries and at our welfare work centres, as also at the Government hospitals and several municipal dispensaries.

One of the chief items of welfare work done by the mills is free medical help for their employees, both male and female, and their relatives. This work is conducted both inside and outside the mills.

For work inside the mills a doctor looks after the health of male employees, while a lady doctor has been engaged for the women workpeople and their children. Both the doctors have two dispensaries each in their charge, one centrally situated for the employees of Mills Nos. 1, 2, 3 and 4, and the other for the employees of Mill No. 5, employees' relatives also being treated at all the dispensaries as stated above. A Statement (Enclosure " K ") showing the number of new and old cases treated at the dispensaries during the last seven years, and another one (Enclosure " L ") showing the number of new cases and diseases treated during the same period, are enclosed herewith. The amount of money spent during the year ended the 30th June, 1927, on medical work for salaries and medical stores, was Rs. 32,529.

The lady doctor, in addition to conducting dispensary work, looks after two creches which have been fitted with a set of cradles and other accessories. The

rooms accommodating the cradles are well lighted and ventilated, and scrupulous attention is paid there to the observation of hygienic principles. Here, babies of women workers are kept and taken care of during the day while the mothers are engaged in their work. The first of these two creches was opened in a building near the No. 3 Mill in August, 1920, with about 14 babies. The caste prejudices, ignorance and superstition of the mothers were gradually conquered, so that in 1921 the number of babies rose to 35, and in 1927 it stood at 85. The other creche, namely, the one at the No. 5 Mill, was started in June, 1921, with five babies only. This place has a special creche building now and occupies a delightful set of rooms near a garden. The number of babies enrolled there during the year ended the 30th June, 1927, was 53. The amount of money spent on the maintenance of the creches in wages and stores, etc., came to Rs. 2,952 during the year referred to above. Such is the opinion the mothers now hold of the care the babies receive at the creches, that at times Mahomedan and even high caste Hindu mothers do not scruple to leave their babies alongside of the Mahar babies, who form the bulk of the population of the creches.

The lady doctor instructs our women employees in maternity with the help of a model, showing maternity travail kept at our central dispensary for females, and she also lectures to them on personal hygiene and child welfare.

I may mention here that all accident cases at our mills, such as require the detention of the patients under medical observation, are sent by us to the Mayo Hospital, to the funds of which we annually contribute Rs. 500.

*Medical Work outside the Mills.*—Late in 1920, medical work was started in Indora, one of the largest bastis, by Dr. Miss Mayadas, a qualified Indian lady doctor, who gave her services voluntarily once a week. She did dispensary and visitation work, paying special attention to maternity cases. But it was not until 1922 that a whole-time Y.M.C.A. medical secretary was appointed to conduct work in the different bastis where we have established welfare work centres. He goes to each of these bastis once a week, but urgent calls are attended to in any basti whenever received. During his visits he not only prescribes and gives medicine, but does house to house visitation, and gives personal talks on basti sanitation and personal hygiene. We are, however, unable to render medical aid to our employees outside the mills, on such a large scale as we do at the mills. For our workers live in different bastis scattered all over the town, and it is not possible for one doctor to visit all these bastis daily. We, however, do what little we can only in those bastis where our welfare work centres have been established. During the year ended the 30th June, 1927, the medical secretary paid 289 visits and treated 10,381 patients, most of whom were dependents of the workers with a sprinkling of workers themselves, and a few outsiders.

The medical secretary has a central dispensary in the welfare work office building, where workers and their relatives can obtain treatment. He gets supplies of medicines from the mills' dispensaries.

*Medical Help for Women.*—Besides medical relief which the women workers are able to obtain from the lady doctor inside the mills, arrangements have been made to reach them in their homes. The work for the women was started in 1925 by Miss Mott, but subsequently it was taken up by the Mother Superior and Sisters of the Convent of Marie Immacule. During the year ended the 30th June, 1927, the work was carried on in six bastis. The sisters accompanied by a trained midwife visit every morning one of these bastis. During these morning visits they see to the cleanliness and tidiness of the houses, examine the sick, give in many cases medicines supplied by the mills, or, if necessary, direct patients to the mill dispensary for women or take them in the welfare conveyance to the hospital. Figures for the morning work in the six bastis during the year referred to above are given below :—

Patients given medicine at home	..	..	..	2,907
Number of women talked to on health subjects	..	..	..	1,855
Cases relating to maternity work	..	..	..	159
Number of women taken to hospital	..	..	..	25

In the afternoon, the sisters conduct educational work for the women. An account of this will be found in my remarks under sub-head (36).

26. All sanitary arrangements at our mills are generally in excess of the requirements prescribed by the Indian Factory Act. As for the homes of the workpeople, very few of the workers have latrines attached to their houses, while the majority of them use public municipal latrines.

(i), (ii) and (iii) We have ample latrine arrangement and a copious supply of water for drinking and washing purposes is provided for our workpeople, but we have no bathing places for them. But at our model settlement all the three conveniences have been provided for.

28. In the existing rules no standards of temperatures or humidity are prescribed, but millowners are required to maintain certain records in this regard, after studying which, some standards will be fixed by the local governments with due regard to the climatic conditions of the provinces concerned. One of the existing rules, however, restricts the use of live steam for humidification purposes. It runs as under :—  
 “ In any department in which steam is used for the purpose of artificial humidification, its introduction shall cease when the dry bulb temperature of the room exceeds 85 degrees Fahrenheit.”

29. So far as my experience goes, there are no diseases which can be said to have their origin in the working conditions as they prevail in up-to-date factories in the cotton textile industry. In this connection I may mention that about eight years ago the C.P. Government, following the example of the Bengal Government, desired to ascertain the incidence of hookworm disease among industrial workers in these provinces, and with that end they deputed at our mills a special staff of medical men to carry on examinations of our workpeople. The work was commenced in August, 1921, and completed in December, 1921. The results of this investigation were kindly intimated to me by Col. T. G. N. Stokes, M.B., I.M.S., the then Director of Public Health, Central Provinces, per his letter No. 624, dated the 10th March, 1922, and I give below the pertinent extracts from that letter, from which it will be seen that the hookworm disease cannot be classed as an industrial disease :—

“ I have the honour to inform you that the enquiry into the prevalence of hookworm disease which we undertook with your kind co-operation in August, 1921, has now come to an end. Out of 6,740 employees examined by our staff, 714 or 10·59 per cent. show infection with hookworm and 1,417 or 21·02 per cent. with roundworm. The result of our enquiry has brought to light a valuable fact that the infection from hookworm disease, which is the more serious, is not nearly so prevalent among your workmen as was expected. This is attributed to the good sanitary arrangements in your mills.

“ The town dwellers seem to make a free use of the mill latrines and these men show a very low percentage of infection in contrast to the workmen drafted from the neighbouring villages, who show a much higher percentage, viz., 23·07 per cent.

“ The special staff has treated, up to 7th March, 161 cases of hookworm disease among your employees with some apparent benefit, but in view of the fact that the disease among your workmen is of a very mild type, and does not incapacitate them much, I have decided to stop work in your mills, so that the services of the special staff may be available in other centres.

“ Our investigation in your mills has brought an important fact to light, viz., the advantage of a good sanitary system. The results of the investigation also contribute much to the medical research work in the province.”

30. In April, 1921, we started at our mills a sickness benefit fund to provide for payment to an employee of a suitable allowance during illness. Any employee can join this fund by contributing to it monthly either 8 annas or 4 annas. A member of the fund contributing 8 annas a month in the event of his illness of over three days, becomes entitled as from the fourth day for the number of days he is ill to an allowance at the rate of Rs. 25 per month up to six weeks, and at the rate of Rs. 15 per month up to eight weeks more if the illness continues ; while a member contributing annas 4 a month is paid for the respective periods mentioned above an allowance at half the above rates. In all cases, the allowance ceases after a period of 14 weeks. We have at present 47 members of the fund, and we paid to three members Rs. 69 as sickness benefit during the year ended the 30th June, 1929.

To my mind, no scheme of sickness insurance can be complete in which only the employers are called upon to bear the whole burden of finance. Both the Government and the employees must add their quota to that of the employers. What the quota of the three parties should be is a matter which the labour commissioners can determine after hearing the various interests concerned.

So far as my experience goes, the Indian labourers have not now that prejudice against the western system of medicine which they had years back. That prejudice is now dying out.

The difficulties due to paucity of medical men and the migratory habits of labour can be obviated if Government and local bodies combine in arranging to provide a dispensary for every village.

31. A maternity allowance for women workers has been in force at our mills since the 1st April, 1921, according to which every woman who has served the company for a period of 11 months is entitled to leave with full wages for two months following her confinement, the rate of the wages being fixed on the basis of her average monthly earnings. The claim for such allowance must be supported by a medical certificate

from the mills' lady doctor, and by an undertaking on the part of the woman concerned that during the period for which she receives the allowance she will not engage herself in any occupation outside her home. On an average, 238 women take advantage of the concession every year and the amount paid them comes to about Rs. 4,800.

Bombay has lately passed its Maternity Benefit Act, prescribing payment for three weeks before and for four weeks after confinement. A Bill was lately introduced in our provincial legislative council on the subject and the same is now being circulated among factory owners to elicit their comments thereon. It is proposed in this Bill to give to an expectant mother, working in a factory, six weeks' leave both before and after confinement on production of a certificate from a qualified medical practitioner and to make her payment for the full period of three months she will be away from work.

On this subject I would say, in general, that all matters pertaining to the welfare of labour are an All-India problem and legislation in the matter must be an All-India one, prescribing a uniform standard of welfare measures for the workers in all the provinces of India. I strongly deprecate the formulation of a set of provincial enactments varying in their details. Again, I consider it wrong in principle that factories in one or two provinces should be saddled with the expenditure of welfare measures, while the majority of the provinces should remain free from such burden. Such legislation is particularly iniquitous at the present time when there is so much trade depression in the textile industry. The factories in provinces which are unburdened can easily undersell those in provinces that are burdened, and thus add to the handicap from which the latter are already suffering.

#### **V.—Welfare (other than Health and Housing, but including Education).**

32. The scheme of welfare work of the Empress Mills consists of an extensive programme, including a variety of items for the welfare of their workers, both inside and outside the mills, and entailing on the mills an annual expenditure of about a lac of rupees. The activities conducted directly by the mills themselves are summarized below :—

(i) Granting of credit chits to workpeople for purchase of grain, etc., at the mills' co-operative stores.

(ii) Free medical help to the employees and their relatives in the mills' four dispensaries, of which two are for men and two for women.

(iii) A system of maternity allowance to women employees who have put in 11 months' service in the mills.

(iv) Provision of creches for the babies of the women employees.

(v) Provision of nursery classes and kindergarten classes for grown-up babies from the creches, ranging from two to six years of age, boys from which classes, when they are over six years of age, pass on to the primary classes, from where they go to an industrial class on attaining the age of 12.

(vi) Factory schools for half-day workers. A yearly contribution of Rs. 600 is given to the municipality who manage these factory schools.

(vii) Yearly contributions amounting in all to Rs. 3,450 of the mills to other schools, which are attended by the children and dependants of their employees.

(viii) Pensions, gratuities, privilege leave, long service bonus, monthly bonus for regular attendance, sickness benefit fund, provident fund and the mills' co-operative credit society.

I would say in this connection that I am strongly in favour of the benefits of the Provident Funds Act being extended to private provident funds and of all firms having such funds being compelled to get their fund registered under that Act.

(ix) *Prizes and Prize Distribution.*—As an incentive to skilled and steady work and regularity in attendance, prizes are awarded on the results of competitive trials, or on the basis of the highest monthly production or the utmost regularity in attendance, also for general skill or proficiency as suited to the various classes of labour concerned. These prizes are distributed annually before a large gathering of mill people and outsiders, generally presided over by the head of the administration of the province. On an average, nearly 1,000 workers dressed in holiday attire are now called up to the platform to receive (which they do with undisguised pleasure), at the hands of the notable ladies of the town, prizes of gold and silver chains and armlets, bundles of cloth or medals; and sweets are distributed among the whole mill population on the day. This simple device, carried out upon a generous scale, creates among the workpeople the needed spirit of rivalry and the will to do better.

The welfare work outside the mills is conducted by the Young Men's Christian Association and by the Mother Superior of the Convent of Marie Immacule. This phase of welfare work is under the control of a board of management, consisting of 14 members. Seven of these are nominated by the mills' management and the other seven by the National Council of the Y.M.C.A. The programme of work may be divided under the following main heads :—

(a) *Educational work*.—For details in respect of educational work, please see my remarks under sub-head (36).

(b) *Recreation and amusement*.—The aim of our recreation programme is to provide wholesome amusement to the workpeople after their hours of work. The programme consists of such items as music concerts, magic trick performances, dramatic shows, indoor games, bhajans and kirtans, and occasional cinema shows. Entertainment is undoubtedly the most popular item and one which is most patronized both by the young and the old.

(c) *Physical work*.—In several of the bastis, where the workpeople live, Akhadas or wrestling sheds have been provided. Wrestling is a very favourite pastime with workpeople, and particularly during the rainy season large numbers of workpeople take advantage of these places. Besides this item, athletic sports and outdoor games have been encouraged and played from time to time in the various bastis. Excursions have also been organized once in a while. Contests and inter-basti matches are arranged every now and then.

(d) *Medical work*.—For details in respect of medical work, please see my remarks under sub-heads (24) and (25).

(e) *Boy scouting*.—The welfare work department has a strong scouting programme. The latest figures show that nearly 400 mill youths have joined the movement. Besides receiving training in scoutcraft, the boys are taught good habits and are encouraged to take part in public service. Some of the scouts have been given special training in ambulance work, and one of the basti troops have started a first aid station of their own. From time to time scoutcraft demonstrations are given to create interest among the basti people for scouting. One such demonstration on a grand scale was given on the occasion of the Mills' Golden Jubilee, celebrated on the 1st and 2nd January, 1927. And on many occasions our scouts have rendered service untriflingly at public functions, melas, fires, cinema shows, etc., sometimes at considerable personal sacrifice.

(f) *Noon-day programmes*.—During the winter months short recreation programmes are arranged at the noon hour in the various mills. These are quite popular. Near the No. 1 mills a building has been rented and is now used as a reading room and games room for the workpeople during their rest hour.

(g) *Women's welfare work*.—Work for women in the bastis is conducted under the guidance of the mother superior and sisters of the Convent of Marie Immacule. The nature of the work conducted by them is dealt with in my remarks under sub-head (36).

The above particulars give a brief account of the extent of the welfare work being done by the mills.

No welfare work is done by other agencies particularly for the workpeople of our mills.

33. As already mentioned in the preceding sub-head, in the case of our mills, the welfare work in bastis is conducted by the Y.M.C.A. which provides secretaries for the purpose ; each secretary having charge of three to four bastis, where centres have been established for the use of the workpeople. But teachers and supervisors and such other staff as is necessary at the various centres, are engaged from among the local people.

Welfare work of a sort is being done in India by the Y.M.C.A., the Y.W.C.A., the Social Service League and the Servants of India Society, but, as there are no facilities in our country for the training of welfare workers as they have in the west, I am strongly of opinion that employers all over India should combine to get out some experts from England to help them to form an Industrial Welfare Society like the one they have in England. I may say in passing that I would like also to get out experts to teach our labour how to run their unions ; for, I believe that an Industrial Welfare Society working hand in hand with labour unions run on correct lines, will change the face of our existing labour situation.

In this connection I would like to give below an extract from a letter which Mr. Robert R. Hyde, founder of the Industrial Welfare Society of England, wrote to me in January last. I endorse what he says and I wish an Industrial Welfare Society of India could soon make it possible for employers to conduct welfare work for their employees themselves :—



"Some years ago this kind of work was entrusted to outside organizations, but it seemed to suggest to the workers that there was a natural division between work and play; that the employer was interested in the labour of the worker and not in his home life. To-day there are hardly any examples of an employer entrusting the administration of the leisure side of the worker's life to an outside agency. In practically every case the organization of the social life of the worker is part and parcel of the firm's welfare department."

34. All the welfare work done for our employees has been dealt with under sub-heads on housing, health and education; and there are no other activities carried on by us.

(i), (ii) and (iii) All welfare activities inside our mills are conducted by us, while those conducted outside the mills are run by the Y.M.C.A., the mills bearing the whole of the expenses, including the salaries of the Y.M.C.A. secretaries.

We have four refreshment shops in the compounds of our mills, where light refreshments like sweets, pans, betel nuts, cigarettes, etc., and teas are served to our workpeople. The experiment was commenced two years back when the shop buildings were built and were let out for very nominal rents to the shopkeepers, but it has not been a great success and it seems some improvement is necessary in the methods of running these shops.

As for shelters, we have provided a number of dining sheds, but due to paucity of space we cannot put up enough for all the workers of all our mills. However, we are utilizing all available space for putting up such sheds.

For creches at our mills and for provision for physical culture, recreation and amusement and other welfare work activities, please see my notes under other sub-heads of head V—Welfare.

35. It is rather difficult to give an accurate valuation of the welfare work done. It must be remembered that the work has largely been concentrated among those workpeople who come from the depressed classes. The following observations are made with diffidence as there are many forces at work which are giving an impetus to the workpeople in their desire for social reform and small but real improvement in the standard of living. All these forces have tended to create a better outlook on life. This may be gauged from the fact that the people are giving up some of their old evil customs. There is a distinct movement towards temperance and there is also a desire for the education of their children.

The results of welfare work can never be accurately measured, but such work by its very nature provides facilities for the development of personality, gives opportunities for self-expression and organization and meets certain needs of the people which perhaps would not be met if they were left to themselves.

36. The mills' educational work for their workers may be classified under four headings :—

(i) Classes conducted in the mills' premises under the direction of the mills' lady doctor :—

(a) Nursery classes to which babies of over two years of age are passed on from the creches at the mills. Here the children play as much as possible with intervals for rest, sleep and nourishment. The games are so planned as to give their little bodies sufficient exercise and at the same time serve to make them find out simple things for themselves, such as the difference between colours. A part of the daily programme comprises singing and story telling. The children are taught to observe personal cleanliness and tidiness and to do as they are told.

(b) Kindergarten classes to which children from the nursery classes pass on, on their attaining the age of four years. Here the same methods of teaching are followed as in the nursery classes, but work is more advanced. Simple outline drawing, bead work, clay modelling, paper cutting and folding and paper matting work, language word making and numerals are taught here. Attention is paid to the formation of good habits and the removal of bad ones.

In both classes the children are given a bath every day by the ayah and dressed in clean clothes provided by the mills. The number of children attending these two classes is 58 and two teachers are specially engaged for these classes.

(c) Boys from the above classes on their attaining the age of six years, are passed on to the primary classes. These classes are also open to any son or dependant of our workpeople. Such boys as used to loiter about the mills premises after bringing meals to their parents now attend these classes. The popularity of these classes is evidenced by the number on rolls having now gone up to 234. The classes were recognized by the Education Department in 1925 for the Vernacular Final Examination. Since the recognition of the classes 41 boys have been sent up for the examination, out of whom 22 passed. Three of the eight teachers engaged for these classes are scout masters and they have under their training 20 wolf cubs and 24 boy scouts at present.

(d) *Industrial class.*—Boys that have finished the courses in the Primary classes and whose ages range from 12 to 14 years are admitted to this class. Special attention is paid in this class to drawing and every effort is made to develop in the boys that sense of accuracy and proportion so necessary in all forms of handwork. Instruction is given in book-binding, thread button making, simple carpentry, tailoring and handloom weaving, and in painting in block letters. Some time is given also to the teaching of arithmetic, language and grammar. This class, which has only one teacher and nine pupils at present, is intended to serve as the nucleus of the Industrial School referred to in the last paragraph under this head.

All these classes have been started with the object of providing a graded course of physical and mental training for the sons of our workpeople nursed at our creches, so that when on reaching the factory-going age of 15 they join us, we might have a much better class of workers than we now have.

(ii) *Factory schools.*—The number of half-time boys, that is to say, boys between the ages of 12 and 15, was about 600 three years ago. For the benefit of these boys, who work in shifts, two factory schools have been carried on, factory school No. 1 for boys from our mills, Nos. 1 and 3 and factory school No. 2 for boys from our mills No. 5. These at first were managed by the Government, but about the year 1921 they were put under the charge of the municipality. The mills contribute an annual sum of Rs. 600 towards the maintenance of these schools, besides giving prizes for regular attendance and free school supplies costing in all a further sum of Rs. 600. The following statement gives the figures of enrolment and attendance, during the year ended the 30th June, 1927 :—

		Number on roll.	Average attendance.
Factory school No. I	..	174	156
Factory school No. II	..	70	47
Total ..	..	244	203

The buildings, in which these schools meet, are very unsatisfactory and cannot accommodate all the boys. To remedy these inconveniences the mills have since 1919 been negotiating with the municipality under whose control the schools are, to sell them the orange market for converting the building into one commodious school building. But up to date no satisfactory arrangement has been arrived at.

Only a little while back factory school No. 1 has been closed, as all the half-time boys studying there having become full-timers could not attend the school, and we do not at present require any new half-timers for our No. 1 and No. 3 mills.

(iii) *Educational work of the mills conducted outside by :—*(a) The Y.M.C.A. for men workers; (b) The mother superior and sisters of the Convent of Marie Immacule for women workers and girls.

(a) During the year ended the 30th June, 1927, the Y.M.C.A. conducted its activities in nine bastis. Of these, eight places had night schools for the workers, full time and half time. The night schools are held for an hour and a half only, usually between 7.30 and 9 p.m., and the instruction is given in the three R's as well as in subjects of general information. The curriculum has been modified to suit the peculiar requirements of the people. The school staff consists mostly of day school teachers, a large percentage of whom have received normal training.

It has been found by experience that it is idle to expect adults of over 21 years of age to attend school at night. The chief reason is that they are too tired and are incapable of sustained mental effort. Usually they are also family men and that is the only time they spend with their wives and children; and there are private affairs to attend to. There may be sickness in the family or some other distraction which would keep a man from coming to school. But the smallness of numbers in the various classes has tended to make the expense quite high. Perhaps this was inevitable; for a central night school is not possible, and classes have had to be organized in different centres where the workpeople reside. This has meant engaging a large number of teachers. Other items which increase the cost per pupil are good lighting and free school supplies. The cost per pupil has worked out to Rs. 25 to Rs. 30 per year. During the year ended the 30th June, 1927, the total enrolment was 385 and the average daily attendance 260.

It is rather difficult to give an accurate valuation of the educational effort. There is no doubt that it is making a certain number of workers literate. The indirect influence of this aspect of the work can also be seen beyond the schoolroom, in such things as a desire for social reform and a small but real improvement in the standard of living.

The night school buildings differ from those of ordinary day schools in that an effort is made to make them community centres catering for the various needs of the bastis. They are used for health propaganda and dispensary work, for basti meetings and lectures, for Panchayat meetings and for bhajans, kirtans, and other entertainments organized by the people themselves. In one centre a register of births and deaths is kept in order to save the people's time in going to the police station. In many other ways each centre tries to meet the peculiar needs of its locality.

To supplement the general curriculum, occasional lectures are arranged in the schools. Some of these are illustrated with lantern slides. Debates and discussions also take place in the schools, and the pupils are encouraged to take part in these. In each centre a small library is provided. This is furnished with newspapers and books, and the millworkers are encouraged to take out books for reading.

Recently an experiment has been tried in the way of education for the adults. In all that has been said above, the basti people have been welcome to take part in debates and discussions, etc., but the new effort took the shape of meeting with the groups of workpeople in their mohallas and talking to them about subjects which interest them. There have been no organized classes, although organized meetings have been addressed by such people as Professor Robertson, Colonel Kukde, Mr. Moghe, and others. The purpose underlying these meetings has been to widen the horizon of the workers' outlook, to give them useful knowledge, and to make them better workers and better citizens.

(b) The work for the women is being conducted by the Mother Superior and Sisters of the Convent of Marie Immacule. The programme of their work is both medical and educational, and in the words of the Mother Superior, " Endeavours are being made to improve the people and their surroundings without taking them out of their social status, to make them better wives and better mothers, without creating the cravings of more elaborate civilization, to make them as happy as they can be within the means at their disposal."

Two of the sisters visit several of the bastis every day by turn and hold classes for the women and the girls. At these classes instruction is given on hygiene, sewing, cooking, moral subjects, and subjects of everyday importance. Instruction is also given on maternity matters, the relief of the sick and the sending of serious cases to hospitals.

The following figures show the average numbers of women and girls at the afternoon classes during the year ended the 30th June, 1927 :—

				Number on roll.	Average attendance.
Women	..	..	..	99	73
Girls	..	..	..	166	126
Total	..	..	..	265	199

(iv) *Contributions to outside institutions.*—The mills also make annual contributions, as per details below, to other schools where the children of the workpeople study :—

	Rs.
Mominpura Mahomedan Primary School .. ..	600
Sitabuldi Mahomedan Primary School .. ..	600
Panchpaoli Depressed Class Mission School .. ..	1,200
Itwari Gujrati School .. ..	600
Rashtriya Kanya Shala .. ..	240
Sitabuldi-Hansapuri Central Gujarati School .. ..	300

In this connection I should make mention of an experiment on a small scale in mass education which I allowed Mr. A. B. Mande, an M.A. of Columbia University, to perform at our mills. The author's idea is association of letters and words with pictures, and his system of teaching might be called visual instruction. About thirty adults consisting of all illiterate people were selected to form a class, and we paid Mr. Mande Rs. 150 to buy materials to prepare his special pictures for the class. The experiment was made for an hour a day for about a fortnight in May, 1927. Mr. Mande showed the class his pictures and made the pupils repeat after him the letters and the words the pictures represented, and afterwards got them to trace the characters on slate. After the tuition was over he examined the pupils in the progress made by them both in reading and writing. Every day the result of the examination was almost nil, except in the case of two youths, who, it was afterwards found out, had attended a night school before. Disappointed with the result the author gave up the experiment.

I also put down here the ideas underlying our efforts for the education of our workers. My aim has been to make our workers not only literate but efficient workmen. For the purpose they are given a knowledge of the three R's. And to make our juvenile workers efficient citizens I have introduced scouting among them to train them to learn good habits and a spirit of social helpfulness. We have also enlisted the help of the cinema and the magic lantern in teaching our workpeople, both youths and adults. And, as I would not like to neglect the training of the bodies of our juvenile labour, I am going to have at our model village, playgrounds and gymnasia for them. Our welfare work scheme is still in its infancy, and as it progresses we shall not rest satisfied with giving our juvenile workers only secular education, but intend to give them also a professional education in a well-organized and fully equipped industrial school to be started by us so as to make them better workmen.

37. Our mills have a system of pension for such employees as have put in twenty-five years' service and wish to retire due to old age or failing health. Our low-paid workpeople are allowed pensions equal to half their average monthly earnings, subject to a maximum of Rs. 9, while for others each case is considered on its own merit, and a suitable pension is allowed, but in this case it is subject to a maximum of one-third of the employee's average monthly earnings. Temporary pensions are also given during long periods of sickness to such workers as have not completed twenty-five years of service. And in cases where workers have not completed twenty-five years of service but are certified by the mills' doctors as unfit for further service, suitable gratuities are given to such workers on their retirement. For detailed rules of our pension fund scheme, please see pages 10 to 13 of Enclosure "M" referred to in sub-head 30.

38. The Empress Mills have (i) a co-operative society for advancing money to their employees at a low rate of interest, and (ii) a co-operative stores for supply to them of the necessities of life. Below is given a brief history of the society and of the stores.

(i) *The Empress Mills Co-operative Credit Society, Ltd.*—As most of the workers of the Empress Mills were in debt and had to pay inconceivably high rates of interest to "sowcars" and Kabuli moneylenders, the management of the mills established in October, 1921, four co-operative credit societies, one each for the employees of No. 1, 2 and 5 mills and one for the employees of No. 3 and 4 mills with a view to give to the workers much needed relief in the matter of interest charges, and incidentally to instil into their minds the ideas of thrift and mutual help. The local registrar of the co-operative credit societies evinced great interest in the matter, and rendered to the management all possible assistance in the initial stages of the formation of the societies. He deputed one of his ablest assistants to explain to the workpeople the advantages of establishing such societies and, due to his exhortations, four societies were formed as stated above, and though the membership of each of the societies exceeded the prescribed limit of 50 members, the registrar was good enough to stretch a point and register the societies as a special case. As the maintenance of four separate sets of accounts for the four societies entailed much work on the staff, and as there was bound to be considerable variation in the profits of the four societies which would have caused discontent among the shareholders of the respective societies, these four societies were amalgamated into one society in November, 1922.

The share capital of the society is of unlimited amount, and the liability of a member is limited to five times the nominal value of the share or shares held by him or her. The face value of each share is Rs. 10, and up to the 30th June, 1929, it was payable either in a lump sum or in regular monthly instalments of not less than Re. 0-8. But as the system of payment by monthly instalments entailed elaborate work on the accounts department, it was discontinued with effect from 1st July, 1929, and consequently the share capital is now payable only in a lump sum.

Only an employee of the Empress Mills who has purchased at least one share of the society is eligible for the membership of the society. The maximum number of shares a member is allowed to hold is 100. The value of shares held by a member is refunded to him in full on his resigning the membership of the society.

The affairs of the society are managed by a committee of 48 members, of whom 24 are elected each year by the general meeting and 24 are nominated by the manager of the Empress Mills, who is *ex-officio* chairman of the committee.

Loan is granted by the society to a member on the security of a promissory note signed by him and of two sureties from his fellow-members up to an amount which is not in excess of five times the value of the shares held by him. Loans are, however, granted in excess of this limit to such members of the society as are contributing to the provident fund of the mills, with due regard to the sums the members are entitled to under the rules of the mill company's provident fund.

The society charged interest to the members for loans advanced to them at the rate of 12 per cent. per annum since its establishment up to 31st March, 1926. This rate was reduced to 10½ per cent. as from 1st April, 1926, and it was further reduced to 9½ per cent. as from 1st July, 1929.

As stated above, the loan required by a member on the security of his promissory note has to be further secured by two sureties also : and in this regard the members needing loans found considerable difficulty during the first two years of the society's existence, as will be seen from the following two extracts from the reports of the committee of management for the nine months ended 30th June, 1922, and the year ended 30th June, 1923, respectively :—

(a) " It is a matter of great regret that the members have still not fully understood the advantages of co-operation as is evidenced by the fact that some of the members having failed to get sureties, when in need of loans, were obliged to resign their membership. All members should, therefore, do their best to extend a helping hand to their fellow-member in need, of course after making proper enquiries as regards his requirements, his ability to pay back, and his good faith, and after satisfying themselves on all these points."

(b) " The committee regret to note many members still do not realize their duty towards their brother members standing in need of loans, for complaints are common in regard to the difficulty experienced in getting sureties for loans required. The committee cannot too strongly impress on all the members the importance of showing a spirit of co-operation and doing all they possibly can for their needy brother members. Any reasonable help extended to the latter will greatly popularize the society and tend to expand its business, which will be ultimately to the interests of all the members themselves."

There have, however, been no complaints since, and members freely guarantee the loans required by their needy brother members, even though some of the latter left the mills' service without settling their accounts and put the poor sureties to loss.

With a view to place the society on a firm footing and inspire confidence among the members as to the safety of the moneys invested by them in the society's shares, the managing agents of the mills sanctioned the grant of a loan to the society at a nominal rate of interest, viz., 6 per cent., and allowed the society to maintain a current account with the mills, which latter still continue to be the chief bankers of the society. In addition to this, the mills also bore the whole of the contingent expenditure of the society, viz., the cost of stationery, share registers, share certificate books and managing committee's annual reports, as also the salaries of two clerks, for the first two years and a part of these charges for the next two years, the total charges thus borne by the mills amounting to about Rs. 7,000.

In spite of rendering all these facilities to the society, it was a pretty hard task for the management of the mills to convince the workers of the mills' *bona fides* in establishing the society ; for, it has been characteristic of them to look with suspicion on any new scheme formulated by the management, however beneficial such scheme might be to the workers themselves. And they easily played into the hands of outside agitators, who always misguided the men even in regard to the measures taken by the authorities for the welfare of the workers. How far the outside agitators were successful in their evil designs, and how difficult the task of the management was, can be gauged from the following observations made in the report of the Committee of Management for the year ended the 30th June, 1923 :—

" The Committee regret to report that after the termination of the strike at the mills in December, 1922, over 400 members resigned, evidently at the instigation of some evil-disposed persons, their membership of the Society, though still continuing in the service of the mills. With a view to clear any misunderstanding existing in their minds, the chairman was good enough to personally explain, at a meeting specially convened for that purpose on the 14th January, 1923, the whole situation to the members, and assured them as to the safety of the moneys invested by them in the Society. These assurances were again repeated at the first general meeting held on the 17th February, 1923 ; and confidence was gradually re-established among the members.

Besides the above resignations, 100 members left the Society during the year on account of leaving the mills' service. The total number of resignations thus came to 519, and the capital refunded to the members, who resigned, amounted to Rs. 8,769-8-0."

The above resignations were the aftermath of a strike which took place at the mills in December, 1922, and lasted only for eight days. But the longest strike in the history of the Empress Mills was the latest one, and that came off on the 30th January, 1924, and lasted for full two months. There were at the time grave apprehensions in the minds of the management, of their previous experience of resignations

*en masse* being repeated after the termination of that strike ; but to their great amazement the result was quite otherwise, as will be seen from the extract given below from the report of the Committee of Management for the year ended the 30th June, 1924:—

“ There was a strike at the mills during February and March, 1924 ; but unlike the previous strike, it did not in the least affect the working of the Society, and there were no resignations of membership, showing the confidence the members have in the Society.”

As regards the financial standing of the Society, I may say that the Society is perfectly solvent, and its popularity is fast growing, as is evidenced by the fact that its share capital, which amounted to Rs. 21,500 at the end of June, 1922, has now increased nine times, it being Rs. 1,91,300 at the end of June, 1929, and its membership, which stood at 1,852 at the end of June, 1922, and which dwindled down to 1,290 at the end of June, 1924, is now 4,500, which works out to about 50 per cent. of the total number of workers and staff on the mills' rolls. The various reserve funds of the Society as at the 30th June, 1928, amounted to Rs. 24,600 ; and it paid to its members regularly every year dividend at the maximum statutory rate of 12 per cent. up to and including the year ended the 30th June, 1926, and at the rate of 10 per cent. and 9 per cent. for the years ended the 30th June, 1927, and 1928, respectively. The fall in the rate of dividend for these two years is accounted for by the fact that there was an abnormal increase in the capital of the Society in these years, while the income of the Society during this period comparatively suffered owing to reduction of  $1\frac{1}{2}$  per cent. in the rate of interest charged to members on loans advanced to them, the rate being reduced from 12 per cent. to  $10\frac{1}{2}$  per cent. as from the 1st April, 1926. The principal aim of the management in establishing the Society is not to pay fat dividends to the shareholders of the Society, but to advance money to its needy members at as low a rate of interest as possible ; and it is in pursuance of this policy that whenever opportunity offers the rate is reduced with due regard, of course, to the financial position and successful working of the Society. A further reduction of  $\frac{3}{4}$  per cent. has accordingly been made with effect from the 1st July, 1929, so that the present rate of interest is  $9\frac{3}{4}$  per cent.

The Society has advanced to its members up to the 30th June, 1929, which covers a period of  $7\frac{3}{4}$  years, loans to the extent of Rs. 18,56,400, against which it had so far to write-off as bad debt only a paltry sum of Rs. 7-2-3, which speaks volumes for the care with which loan applications are scrutinized.

Up to the 30th June, 1929, 17 of the members who had taken out loans proved defaulters, having run away without settling their accounts, which showed an aggregate amount of Rs. 920-14-6 outstanding against them. The Society recovered from the sureties concerned Rs. 913-12-3, while the balance of Rs. 7-2-3, being irrecoverable was debited to “ Bad Debts Reserve ” account as mentioned above. Of the sum recovered by the Society from the Sureties, Rs. 207-6-0 are paid or are being paid to the sureties concerned by four of the defaulters, Rs. 319-2-3 will be recovered from two of the defaulters as a result of awards granted by the registrar, while the balance of Rs. 387-4-0 is irrecoverable, and represents loss to the poor sureties.

The head accountant of the Empress Mills is the honorary auditor of the Society. His appointment is made every year with the previous sanction of the registrar as required by Section 17 of the Co-operative Societies Act. But to test the audit work done by him the registrar deputed one of the auditors of his office in August, 1926. This official examined all the books of the Society, and was quite satisfied with the way they were maintained, and the audit was done.

In conclusion, I may add that at the annual general meetings of the Society, the managing committee arrange to have most of the resolutions proposed and seconded by such of the members of the Society as are selected every year from amongst the operatives who know a little reading and writing, with a view to make them take interest in the Society's affairs. Thus the Society has some educative value also, so far as the workpeople are concerned.

(ii) *The Empress Mills Co-operative Stores, Ltd.*—The Stores are successors of the Mills' cheap grain shops, which were started in September, 1917, to afford some relief to our workers from the high cost of living then prevailing. These shops were closed as from the 1st October, 1924, on the introduction into the Mills of a system of consolidated wages and salaries. Details of our cheap grain and cloth shops and of the system of consolidated wages are given in my remarks under subhead 115 (v).

At the mills' cheap grain shops the necessities of life could be had on presentation of the mills' credit chits given week by week on the basis of the worker's earnings, the value of the purchases made during the month being deducted on payday. This was a facility which I felt our workpeople would badly miss. In consultation with the Y.M.C.A. people, who conduct our mills' welfare work, I decided to start a Co-operative Stores of our workpeople, where the necessities of life could be had by them

as before on presentation of the mills' credit chits, but at market rates. A co-operative stores called the Empress Mills Co-operative Stores, Ltd., was registered under the Co-operative Societies Act on 26th September, 1924. The membership of the stores is open to all employees and pensioners of the mills, to commission agents of the mills and to the secretaries and employees of the Empress Mills' welfare work. The authorized capital is Rs. 25,000, divided into 5,000 shares of Rs. 5 each. The number of shareholders in the beginning was 672, the number of shares subscribed for was 1,046, and the subscribed and paid-up capitals were Rs. 5,230 and Rs. 3,341-8-0 respectively. As at the 30th June, 1929, there were 663 members who have subscribed for 1,273 shares, and who have paid up Rs. 6,565. Subscriptions of share capital have been allowed to be paid in monthly instalments of at least 8 annas per share so as to enable the workers to become members of the stores in as large numbers as possible.

The Stores started work on the 1st October, 1924, by buying up the stock of grain, etc., left in the mills' cheap shops, worth about Rs. 54,000. In order to set the Stores on its feet the mills advanced loans to it from time to time. During the first year of its existence loans to the extent of Rs. 2,30,877-11-6 were advanced to it, and no interest was charged on the loans till June, 1926. The salaries of the manager of the Stores and of four clerks and the cost of stationery, account books, etc., aggregating about Rs. 10,800, were also borne by the mills for the first two years. And no rent was and is still being charged the Stores for the buildings it occupies in the mills' compound. Since the 1st October, 1926, the Stores has been bearing the salaries of its staff, and has since the 1st July, 1926, been maintaining a current account with the mills, the rate of interest charged by the mills on the debit balances being 5½ per cent. As a matter of concession, the mills have also been allowing the Stores the same rate of interest on any credit balances their account might have.

At the Stores our workpeople get the best of stuffs and full measure, which it is very difficult for them to get from the bazaar, particularly in view of their habit to buy on credit. And the profits that result from economical management go back to the workers themselves, of course to such as are shareholders, in the shape of 6½ per cent. dividend on shares and a further 6½ per cent. by way of rebate on purchases made during the year of over Rs. 20.

The management of the Stores was in the beginning entrusted to a committee of 7 members, 3 being workers elected by shareholders of the workers' class, 3 more being nominated by the mills and 1 by the Y.M.C.A. By a resolution of the general meeting held on 17th November, 1928, the number has been raised to 11, 5 being nominated by the mills, 1 being nominated as before by the Y.M.C.A., and 5 being elected by workers, one each from among the shareholders of the workers' class of each of our five mills.

In view of the growing popularity of the Stores among our workers, particularly the Mahars, who chiefly congregate in a locality known as Indora, it was decided by the Committee of Management early in 1927 to open a branch of the Stores at Indora for the convenience of our workpeople there. The sales at this branch approximated to Rs. 3,500 per month in the beginning, and have since gone up to Rs. 5,000 per month.

Another branch for the convenience of our workers living in Siraspeth, Utkhana and Shukerwari localities was opened at Shukerwari early in 1928, and at this shop the monthly sales approximate to Rs. 3,500.

The monthly sales at the main shops of the Stores now aggregate Rs. 30,000.

During its existence of about five years the Stores has been able to accumulate out of profits reserves aggregating Rs. 29,400 besides having been able to pay its own way all round, and distributing among the shareholders about Rs. 7,700 by way of dividends and rebates.

## VII.—Safety.

43. The necessary regulations are embodied in the Indian Factories Act and Rules, providing for the guarding of dangerous parts of machinery, and for exits in case of fire; and in my opinion, these provisions seem to ensure ample safety.

45. Most of the accidents are caused by absent-mindedness or carelessness of workers. Very few are due to heedless inattention to the rules prescribed for safety and there do occur a case or two where the accident is the result of wanton trifling with machines in motion.

46. *Accident Prevention including "Safety First" Propaganda*:—Illustrated posters and notices in big bold letters, both in English and in the Vernaculars, are put up in prominent positions in the different departments of our mills.

48. As required by the Indian Factories Act, first-aid appliances are kept by us in the different departments of our mills. As for medical relief, the question has already been discussed under subhead 24.

49. *Stringency of inspection and enforcement of Regulations.*—(i) *In industry generally.*—(ii) *In seasonal industries, and 50.*—*Effect upon safety of hours, health, light and working conditions generally.*—These are matters which require an outside angle of vision and as such can best be treated by factory inspectors whose province it is to administer the laws relating to the matters.

At the same time I should mention here that the Local Factory Rules, especially those providing for prevention of overcrowding, sanitary accommodation and fencing and guarding of machinery are very stringent as compared with those of the Bombay Presidency, which is the premier Presidency so far as the cotton industry is concerned. The Rules of the Bengal Government are even more lax than those of the Bombay Government. The mills in our provinces have also been saddled with the maintenance of Kata Thermometer readings so as to enable the Government to fix a standard of air movement for factories, while the Bombay Government have not enforced the maintenance of any such records. Such undue stringency of our local government puts millowners in our provinces, at a distinct disadvantage as compared with millowners in other provinces, and it is inconceivable why our province, which is industrially and commercially so far behind a major province like Bombay should have more stringent factory regulations.

### VIII.—Workmen's Compensation.

51. *Workmen's Compensation Act.*—The extent of the use of the Act and a comparison of this extent with the extent of possible claims are matters within the province of the commissioners under the Act and the factory inspectors who see to the administration of the Act. The presence of such an Act on the Statute Book is beneficial to the workers for whom it ensures compensation in case of injuries received in the course of employment and establishes better working conditions as a result of the factory owner's endeavours to minimise accidents by taking steps for the safety of the workers.

In this connection I may mention the practice at our mills in respect of accident compensation. Ever since the beginning of our mills an injured worker, if he could come to the mills, was put on very light work. If such a worker had to stay at home he was given half his usual wages for the number of days he was so absent. Even those that had got crippled as the result of the injuries sustained were kept back on work suited to their capacity. Deaths due to accidents have been very rare at our mills, but in cases of deaths, suitable compensations were paid to the dependants of the deceased. In 1921, the scale of such compensation was fixed at Rs. 300 minimum and Rs. 1,000 maximum.

There are a number of insurance companies that undertake to cover the risk under the Workmen's Compensation Act, and looking to the gravity of the risk involved, I think no far-seeing millowner would prefer to allow the risk to remain uninsured. In fact, the millowners in Bombay have formed a Mutual Insurance Association of their own to cover their risks under the above Act. To my mind such insurance is beneficial from worker's as well as employers' point of view.

52 and 53. The Act has been applied to most of the industries and trades of the country, and no further extension in this direction appears to me necessary. It would be however, desirable to abolish the existing restriction, in respect of workmen employed in the construction, repair or demolition of buildings and bridges which allows compensation to an injured workman only when the building or the bridge in question is of a certain height or length.

To provide against a claim under the Workmen's Compensation Act by a worker being vitiated by the insolvency of an employer, I would suggest that all employers be compelled to insure their risk under the Act so that in case of insolvency of employer the worker can get his compensation from the insurer as provided for by Section 14 of the Act.

The existing scales of payment of compensation are quite reasonable.

On the subject of the suitability or otherwise of the existing conditions laid down in the Act to govern grant of compensation, I have the following remarks to make :—

(a) I would retain the waiting period of 10 days, but I recommend that when the disability extends beyond 10 days, compensation be paid for the full period of absence from work.

(b) The existing list of relatives entitled to compensation may be enlarged by adopting the list given in the Recommendations of the Seventh International Labour Conference on minimum scale of compensation.



(c) The commissioner under the Act may be empowered to demand proof of dependence from a relative or relatives claiming compensation for the death of a worker in order to enable him to determine the proportion of compensation to be paid to each of several claimants, but it may be left to his discretion to waive demand for such proof, say in the case of a widow with minor children.

(d) It would be wrong in principle to fix compensation according to the number of dependants, as it would lead to some claims being made which would otherwise have not been made.

(e) Employers should be required to include in the return to be submitted to the commissioner all accidents resulting in the injury causing the workmen to be absent from work beyond the waiting period of 10 days with a distinct remark against each case stating whether compensation was paid or not, and if paid, how much.

(f) A dependant claiming compensation may be relieved from the necessity of approaching the employer for the settlement of his claim. He may apply direct to the commissioner.

(g) The following measure should be taken to ensure that workpeople and dependants, who may have valid claims for compensation, do not lose compensation through ignorance of their right. I suggest that the time mentioned in Section 10 of the Act for putting in a claim, *viz.*, 6 months from the date of accident when the injured man puts in a claim and 6 months from the date of the death of the workman when his dependants put in a claim, should be increased to 2 years. This provision coupled with the provisions of compulsory inclusion in the Annual Return of practically all accidents, and of relieving dependants of the necessity of approaching the employer will afford sufficient protection to the illiterate and ignorant workpeople. When the Annual Return comes in the commissioner will see in what cases compensation has not been given, institute enquiries and advise the parties entitled to compensation about the claim they should put in and help them to prefer the claim.

(h) The commissioner should be empowered to call upon employers depositing insufficient compensation for fatal accidents to make a further deposit, stating in his order his reasons for considering the original deposit insufficient.

(i) Provision should be made in the Act for the suspension of distribution by the commissioner of the compensation among the dependents pending the disposal of any appeal against his decisions.

About the suitability of the provisions in the Act relating to industrial diseases, I am not in a position to say anything, as I am not aware of any industrial diseases peculiar to the textile industry.

I consider the existing machinery for the administration of the Act quite suitable. Besides the commissioner, who administers the Act, there are the factory inspectors who enquire into accidents and see that compensation is paid where it is due. If the work proves too heavy for the existing staff of factory inspectors, an addition may be made to the staff.

### IX.—Hours of Work in Factories.

55. (i) The normal hours worked per day and per week are 10 and 60 respectively. The daily working hours are from 6–30 a.m. to 5–30 p.m. with a recess interval of one hour from 11–30 a.m. to 12–30 p.m.

(ii) The actual hours worked per day and per week in regard to most of the processes are also 10 and 60 respectively.

However, certain processes, in which work has to be carried on continuously for technical reasons, and works connected with power plants and certain other works, which have all been exempted from the provisions of Sections 21, 27 and 28 fixing rest periods and limiting working hours per week and per day respectively, have to be attended to during mid-day recess hours and beyond working hours. But even in such cases the number of hours put in by the workers concerned does not exceed 10 per day and 60 per week, as it is a practice with us to relieve them by turns and give them an hour's rest.

At our mills urgent repairs are generally taken in hand on the day preceding a holiday, on which day only the number of hours put in by the workers employed on such work comes to 17. Certain exempted works are done on holidays also. But in no case do the actual hours worked in a week including overtime exceed 72.

(iii) The spreadover does not exceed one hour per day.

56. As a rule our mills work for six days a week, from Monday to Saturday, but when a holiday has to be given on any other day than Sunday, as prescribed by the Factories Act, the mills may work without a break for a period of ten days at the utmost.

57. *Effect of 60 hours' restriction and (58) Effect of daily limit.*—Though the workers have now more time to look after their domestic affairs and to get recreation, there is no improvement in their indolent habits, as the accompanying statement (Enclosure "S") of absenteeism among the workers at our mills during the years 1914 to 1918 and 1924 to 1928 can show.

59. *Possibility of Reduction in Maxima.*—Please see my remarks under subhead (115).

60. *Intervals.*—(i) It is a practice at our mills to allow the workers for about a quarter of an hour at a time to go out of the departments during working hours either for a smoke or for attending nature's calls. About 10 per cent. of the workers are allowed to go out at a time from each department. But it is our experience that the workers actually go out more than once and waste over an hour.

The regulation meal-time is the noon-day recess hour, viz., from 11.30 a.m. to 12.30 p.m., but most of the workers take their meals during working hours.

(ii) In my opinion the existing regulation is satisfactory.

(iii) *Suitability of Hours during which Factory is Working.*—Our mills work from 6.30 a.m. to 11.30 a.m., and from 12.30 p.m. to 5.30 p.m., and these hours have been fixed with due regard to the habits and conveniences of our workpeople.

(iv) Besides Sundays or holidays substituting these statutory weekly holidays, we give an extra holiday for Divali festival, half a day's holiday extra for Mohurram, and an hour and a-half's extra holiday each on Hindu Pola and Holi festivals.

61. *Day of Rest.*—This has already been discussed under Subhead (56).

As regards the suitability of the law, I consider the existing provisions quite satisfactory.

62. *Exempting Provisions and the use made of them* The principal statutory restrictions imposed by the Act are embodied in Sections 21, 22, 27 and 28 of the Act, which relate respectively to daily rest intervals, the weekly holiday, and limitation of working hours per week to 60 hours and per day to 11 hours. Section 29 of the Act exempts all persons holding managerial or supervising positions from the provisions of all the above sections, while the local government have, under the powers vested in them by Section 30 of the Act, exempted under certain conditions, with due regard to the requirements of the textile industry, work on urgent repairs from all the provisions of Sections 21, 22, 27 and 28 referred to above, and certain works from one or more of the provisions of these sections.

## **X.—Special Questions Relating to Women, Young Adults and Children.**

81. *Effect of 1922 Act on Employment.*—The most important improvement which this Act made upon the old Act of 1911 is the reducing of the daily hours of work from 12 to 10. And as in spite of the reduction in the hours of work the level of wages has practically remained the same, the new Act has not only served to make labour engaged in the textile industry more steady, but is also attracting to it labour from other industries.

82. An infant is generally defined to be a child under seven years of age, and as no child under 12 years of age can be admitted to a factory under the Indian Factories Act, I take it this question refers to the small children who bring meals to their parents or relatives, or who follow them owing to there being no one to look after them at home. This is a very grave problem for factory owners, more particularly those in the Mofussil, where the children, as a rule, accompany their mothers to the factory, in as much as they run the risk of being prosecuted for having employed children in contravention of the Act, if on the occasion of his visit to the factory an inspector found such children inside the factory building. In spite of strict supervision in this regard at our mills, these small ones sometimes manage to get into the factory building and near the machines attended to by their parents or relatives. It is particularly for preventing such children from loitering about in our mills' compound that we started for them the primary classes referred to in my remarks under subhead (36).

83. *Suitability of Regulations for Women's Work.*—Under the old Act the daily hours of work for men were 12 and those for women 11, while under the new Act the hours for both men and women are reduced to 10 per day. I have nothing to say against this, and other regulations regarding women's work in factories. I would only mention here for the sake of interest a practice obtaining at our mills for the last fifty-two years, according to which our women workers come to the mills after the men have trooped in and leave before the men are out for fear of being molested by black sheep among the men. This practice has prevented us from engaging women conjointly with men in departments where the machines must be kept running during

all the time the mills are working. As such we engage women only in departments the work in which does not hamper other processes. Even after the passing of the new Act of 1922 the women come to work half an hour later in the morning, as they used to do before. Only in the evening they leave a quarter of an hour earlier than the men instead of half an hour, as they did before. We are thus deprived of three quarters of an hour's more work which under the Act we might get from the women, but which we cannot get from them on account of the above long-standing practice.

In this connection I would say that I am of opinion that every province should have a lady doctor as factory inspector to look after the health of women workers, and more particularly to see to the administration of welfare measures like grant of maternity benefits such as our local government intends to introduce in our provinces. Some time back there was a proposal to have a lady factory inspector for our provinces, and I don't know why the proposal has not yet materialised.

84. I have nothing to say about the existing regulations for children's work. Under the Act the maximum number of hours a child, i.e., a person between the ages of 12 and 15, can put in at a factory is six. And the utmost number of hours a child can be made to work continuously is  $5\frac{1}{2}$ . In case the total number of hours a child is employed for is 6, the child must have an interval of rest of half an hour after 4 hours' continuous work. At our mills the total number of hours a day a boy puts in is 5, in two shifts of  $2\frac{1}{2}$  hours each. And our boys are divided into two batches. The first batch starts work with the starting of the mills at 6.30 a.m. and leaves at 9 a.m. This batch is followed by the second batch, who work from 9 a.m. to 11.30 a.m., when the mills close for the afternoon recess of one hour. On the mills resuming work at 12.30 p.m. the boys of the second batch continue work and leave at 3 p.m., when they are followed by the boys of the first batch, who work on till the close of the mills at 5.30 p.m. And these batches change places every fortnight, the first batch working during the hours the second batch worked and *vice versa*.

All these half-timers, after work is over, are sent to the factory schools, boys of the first batch attending school in the morning and those of the second shift in the afternoon for about an hour and a-quarter.

When these half-timers have completed their 15th year we give them full timers' work and wages. Such adult children replace two half-timers each, and as at present our labour is steady and very few vacancies occur among our full-timers, we are not taking up at present new half-timers in place of those that become full-timers on completing their 15th year.

85. *Double Employment of Children.*—This is prohibited by Section 25 of the Act. The evil exists only in the Mofussil, and particularly in ginning and pressing factories. As it is the parents themselves that are responsible for such employment of their children, provision has been made in the factory rules for fining such parents, and no further action seems to me necessary.

86. *Work and Training of Young Adults : Facilities for Apprenticeship.*—All beginners at our mills are kept under men trained in the particular work for which the newcomer is taken up. Usually the period of such probation ranges from ten to twenty days, and in some cases to one month, depending upon the intelligence and the manual dexterity of the learner. If the work suits the learner he stays on and becomes a permanent employee of ours ; otherwise he leaves us within eight to ten days even without informing the head concerned.

As stated in my remarks under subhead (36) I intend to have in the near future a fully equipped industrial school for the training of our adult children.

89. *Work of Women and Children in Factories not Subject to Act*—(i) *Use by local governments of Section 2 (3) (b), and (ii) advisability of extended application.*—Section 2 (3) (b) allows local Governments to extend, by notification in the *Gazette*, application of the Act to factories simultaneously employing not less than ten persons on any one day in the year. As our local Government have, by a notification, already extended the application of the Act to such factories, I don't think any further extension of the Act, so as to make it apply to places where less than ten persons are employed on any day in the year, necessary or advisable.

## XII.—Wages.

96. A statement (enclosure " T " ) sent herewith showing rates of wages of skilled and unskilled labour at our mills during the years 1913, 1918, 1920, 1924 and 1928 will serve to illustrate the movements of rates of wages.

(i) A statement (enclosure " B-1 " ) showing average earnings per operative per day at our mills in pre-war and post-war periods is enclosed herewith.

(iii) Till the 30th September, 1924, our workpeople used to get, besides their wages, scarcity allowances and were also supplied grain, etc., and cloth at less than market rates. The money value of all these benefits was calculated and was added to the wages and as from the 1st October, 1924, a system of consolidated wages was introduced at our mills, which is still in force.

97. (iii) A statement (enclosure "C-1") enclosed herewith shows the rates ruling during the pre-war and post-war periods of the necessities of life of the labour classes. A comparison of this statement with the statement of average earnings referred to in subhead (96) shows that while there has been an increase of 121 per cent. in earnings, there has been an average increase of only 34 per cent. in the prices of the necessities of life.

102. *Basis of Payment for Overtime and Sunday Work.*—The rate fixed by the Indian Factories Act is one and a quarter of the ordinary rate. This is for both day and night overtime work, but we give a much better rate for night work, which we pay at the rate of a day's wages for four hours' work instead of eight hours' work as required by the law.

103. No standardised wages are in vogue in Nagpur.

104. I can only say that the increase in the rates of wages at our mills which compare very favourably with the rates of wages of outside workers and reduction in working hours have tended of late to establish an element of stability in our labour force.

105. *Minimum Wages Advisability and Possibility of Statutory Establishment.*—The question was broached by the Government of India, Department of Industries and Labour, in their demi-official letter No. L-1526 dated the 6th January, 1928, to the local government, in which opinion was invited on the attitude to be adopted by the Government delegates to the International Labour Conference to be held at Geneva where the question was to come up for discussion. In my D.O. letter of the 9th February, 1928, to Mr. C. M. Trivedi, the then Director of Industries of our Provinces, who had invited me to express my opinion on the subject, I had stated that in a country like India with nascent industries and with standards of life and education of the working classes radically different from those of western countries due to climatic and other causes, too many statutory restrictions might sap the growth of industries. I had also stated in my letter that if the considered opinion of employers of labour was sought to be elicited, they should be furnished with the full text of the discussion which had taken place on the subject at the International Labour Conference of 1927, which had not been sent them.

106. (i) *Extent of fining.*—In a textile concern most fines are naturally in respect of bad work turned out particularly by weavers. But unlike mills in other places, where the practice seems to be to recover from the worker to the full the value of the damage done by him by handing over the damaged piece of cloth to him and recovering from him the cost of the materials supplied to him for manufacturing the cloth, we impose small fines ranging from 2 annas to Re. 1. The amount of fines so recovered from weavers covers only about one-tenth of the loss they inflict upon the mills through bad work turned out. In a year, on an average, while the fines aggregate about Rs. 1,600 the loss incurred owing to damaged, faulty and stained cloth being sold at about 25 per cent. discount off the selling price for good cloth, comes to about Rs. 60,000. Fines are also inflicted for breaches of discipline and for damaging or destroying materials and tools, but the maximum rarely goes to Re. 1. The fines recovered under these heads in all the departments of the mills and for bad and negligent work in departments other than weaving come to hardly about Rs. 1,000 per year. The total amount of fines per year thus comes to Rs. 2,600 against annual wage bill of about Rs. 21,48,000, or 12 percent. of the wage bill.

(ii) *Other deductions.*—In cases where in spite of repeated warnings and small fines a weaver continues to turn out bad cloth, we reduce the amount of work entrusted to him, that is to say, if he had two looms in his charge, we take back one from him and allow him to mind only one loom till such time as he shows improvement in his work. Similar punishment is inflicted on workpeople in other departments who turn out bad work. In this connection I may mention that the double Khada system according to which a worker who absented himself without leave lost two days' wages for one day's absence has long since been practically a dead letter at our mills. I would have formally announced to our workers the abolition of the system at our mills, but I have been waiting for the decision of the Millowners' Association who were going to formulate rules for the workers after discussing the findings of the Fawcett Committee with the labour leaders, which has not so far been possible, due to the prolonged strike in the Bombay mills.

(iii) We credit all unclaimed wages and fines recovered to our pension funds, so that the workpeople's money ultimately returns to them.

(iv) Dread of punishment of some sort is necessary to prevent the ordinary run of men from straying from the correct path ; and fines for bad work or bad conduct do form a fairly good corrective so long as they are proportionate to the gravity of the mistake or misdemeanour. I am, therefore of the opinion that legislation in such a matter is not desirable. If, however, it be decided to enact a law in India, I would like it to be on the lines of the English Truck Act, 1896. This Act provides for exemption in case of such establishments as in the opinion of the Secretary of State do not need the control of the Act, and I suggest that the Government of India will incorporate in their legislation a similar exemption in favour of establishments like ours where the workers are treated so leniently and generously as I have described above. I would further suggest the inclusion of a provision that the maximum of fines should not exceed 5 per cent. of the wages of the worker. The task of enforcing the provisions of the Act may be entrusted to factory inspectors.

107. (i) There is a system of monthly payments in vogue at our mills, but at our ginning and pressing factories wages are paid weekly.

(ii) Many years back the last date of payment at our mills was the 26th of the month following that for which the wages were due. It was then gradually brought forward from the 26th to the 20th and then to the 17th and now it is the 14th. Thus at present the period elapsing between the date when wages become due and the date of payment ranges from 7 to 13 days.

(iii) (a) Workers are generally in the habit of taking a day or two off immediately after pay day. A large number of them also visit grog shops and spend much of their money on drink. Looking to these habits of the workers, the system of weekly or fortnightly payments, if such a system were at all feasible, would prejudicially affect their interests much more than those of the employers ; and I think the existing system of monthly payments, which is prevalent in these Provinces and elsewhere, so far as the textile industry is concerned, seems to be the best from all points of view. It has worked very well so long and no change therein nor legislation to regulate the periods of payments seems desirable or necessary.

(b) From the details given under subhead (ii) above, it will be seen that payments to workers proper are commenced on the seventh day of the following month and completed on the fourteenth day. This delay is chiefly due to elaborate and intricate piece-work calculations that have to be made in respect of no less than 4,000 workers and is unavoidable. Beside, it does not inflict any hardship on the workers in that we have a system according to which all our employees, whose monthly earnings amount to Rs. 100 or less, are made advance payments in the shape of credit chits of one rupee each exchangeable at the Empress Mills Co-operative Stores, Ltd., for the necessities of life. Such chits are issued once a week and up to a maximum of three-fourths of the wages or salary earned up to the date of issue of chits by an employee, the total value of the chits issued being recovered from the employees on pay day. The remaining one-quarter of his earnings, against which the employee is not allowed chits, is meant to cover his contribution to the provident fund and instalments against loans borrowed from the Empress Mills Co-operative Credit Society, Ltd. As further help to workers, advances are also allowed them in cash on the eve of important festivals with due regard to their earnings, and are recovered on pay day. No interest is charged for advances whether they are in the shape of cash or chits for the necessities of life. The delay in payment from 7 to 13 days is in my opinion quite reasonable at present in the case of textile mills and more especially large mills like ours where, as already mentioned above, intricate evaluations have to be made for the piece-work, and I am not in favour of legislation fixing an intervening period.

At our mills' ginning and pressing factories, which are seasonal factories, wages are paid weekly, as already stated under subhead (i) and payments are made the next day they are due. So far as my information goes, the same practice obtains at other ginning and pressing factories also in our Provinces, as it is feasible seeing that the number of persons employed in seasonal factories is generally so small as compared with the number in textile mills. The existing practice is quite satisfactory and no question of legislation can arise in this case.

(iv) Unclaimed wages are ultimately credited to our pension fund.

108. A large majority of the ordinary class of workpeople are in debt due principally to large expenditure, which is quite out of proportion to their earnings, on weddings, funerals and religious ceremonies. With a view to save the workers from the clutches of the usurious moneylenders, the mills used to give loans on the security of sums standing to the credit of the workers in the mills' provident fund accounts, but as there was a large number of workers who could not get the benefit of this arrangement due to their not being members of the mills' provident fund, the mills established in the year 1921 a Co-operative Credit Society which has proved a boon to the workers. It advances loans to its members either on the security of the

provident fund money with the mills or of two sureties who must be members of the society. The rate of interest charged on loans was in the beginning fixed at the maximum statutory limit of 12 per cent. but it has since been gradually reduced to 9½ per cent. Out of about 8,800 workers of the mills, about 4,500 have become members of the society ; and during the year ended the 30th June, 1928, 2,431 members were granted loans aggregating Rs. 5,10,224. Borrowings from outside moneylenders have, however, not completely ceased in spite of the fact that a very high rate of interest has to be paid to them ; for loans can easily be obtained from them on personal security. But there is a growing tendency among the workers to take full advantage of the facilities provided by the mills as can be seen from the statistics of the society furnished in the statement (enclosure " O ") :— \*

109. *Bonus and Profit-Sharing Schemes.*—No such schemes are or have been in operation at our mills. It may, however, be mentioned that in prosperous years when the mills made very large profits, and on the occasion of the mills' Golden Jubilee, the board of directors allowed bonuses to the employees.

110. (i) A statement (enclosure " U "), showing the leave taken by our workers during the calendar year 1928, is enclosed herewith.

(ii) We have rules for privilege leave, in terms of which the staff comprising the heads of departments, foremen, assistants, apprentices and the office and departmental clerks are allowed privilege leave at the rate of two days per month of active service, leave up to 10 consecutive days granted to any member of the staff in a month being counted as active service. The privilege leave can be allowed to be accumulated only up to 90 days in all, and any excess is forfeited ; the idea of this rule being to compel a member in his own interest to take the leave allowed to him every three or four years.

Leave with pay for 12 days in a year is allowed to any workman whose service exceeds 20 years.

To those workers, however, who have not put in 20 years' service and who are consequently not entitled to privilege leave, leave without pay is freely granted for a reasonable period with due regard to the purpose for which the leave is required. When, however, a worker overstays the leave granted to him and fails to offer satisfactory explanation for doing so his services are dispensed with. A worker's name is also struck off the roll if he absents himself continuously for a period exceeding three months. This rule is, however, not enforced in cases of illness.

(iii) As explained in my remarks under subhead 106, the double khada system being practically a dead letter at our mills, whether a worker is absent with or without leave, not a pie of his back-lying wages is forfeited.

111. I have read in Prof. Henry Clay's recently published book entitled " Industrial Relations and other Lectures " that the difficulties in the way of insertion in public contracts of a fair wage clause have now been overcome and the clause finds its place as a matter of course in all labour contracts in England with beneficial effects for both employers and employed. But England is principally a manufacturing country, while India is principally an agricultural country. Again while industries in England are highly organized, conditions in Indian industries are just beginning to be regulated by the Government. In the circumstances I would advocate the introduction of the fair wage clause in India only when we have in India a labour office such as they have in England and trade unions in India are run on the lines of trade unions in England. I understand that one of the principal duties of the Labour Office in England is to prepare a list of approved contractors with whom contracts might be placed by the Government, railways, tramways, public utility companies, municipalities and local boards, and who have agreed to insert the fair wage clause in their contracts, and that if any of those contractors can prove to the satisfaction of the Government that payment of wages according to the fair wage clause has entailed loss on them in a particular contract, compensation will be paid to them by the Government. I should therefore be happy to accept the fair wage clause in all contracts made by our mills if Government arranged for our mills being placed on the lists of Government and public institutions named above, who should have orders to buy all their requirements only from the firms on those lists.

### **XIII.—Industrial Efficiency of Workers.**

112. I am sending herewith a statement (enclosure " V ") giving figures of production, efficiency and spinning cost of a few of our standard counts of yarn for the years 1900, 1910, 1914, 1921, and 1928. Another statement (enclosure " W ") giving similar figures in respect of a few of our standard varieties of cloth is also sent herewith. The figures relate to different epochs of our mills' life, viz., the time when the mills worked from sunrise to sunset in the absence of any statutory

restriction on the hours of work, to the time when the hours of work were restricted to 12 per day by the Indian Factories Act, 1911, and to recent times when the 1922 Act reduced the hours of work to 10 per day. They show that reduction in hours of work has not in any way improved the efficiency in our spinning department, and has effected only a slight improvement in the efficiency of our weaving department. They also show how cost has increased, due to increase in wages and other charges, and that the net result is shorter working hours and more pay for the workers, without any gain to the employers. In this connection I may remark that the increase in wages has tended to make labour stick to the textile industry, but has made it irregular in attendance: for the workers take French leave whenever they like, as what attendance they put in brings them just sufficient money to maintain themselves. Another reason why our workers, particularly the Mahars who form the majority of our workers, can afford to be irregular in attendance is that their women folk also go out to work, and in many cases there are about three to four earners in a family.

113. *Comparative efficiency of Indian and foreign Workers.*—I tried to get the necessary literature which would help me in coming to some conclusion, and I approached for the purpose the Industries and Labour Department of the Government of India, but I have not been able to get from them the sort of information I required. As for the remark that is generally made that Indian labour is very cheap, and as such India can undersell Manchester, I would say that it is true in a sense only. The wages paid to individual workers in India are comparatively much lower than those paid to workers in Lancashire, but it has to be borne in mind that on work which one Lancashire worker can do we have to employ four to five Indian workers. Again, a proper comparison of the relative efficiency of Indian and foreign workers can be made only when a fair basis has been arrived at, and for the purpose we must have figures of production turned out in India and foreign countries of identical counts spun and similar varieties of cloth made. Such statistics in regard to the working of the mills in England, America and Japan would be very interesting. In this connection, I reproduce below the following figures taken from the Report of the Indian Tariff Board (Cotton Textile Industry Enquiry) 1927, which give only a very rough idea of the relative efficiency of Indian and foreign labour.

Name of country.	No. of spindles looked after by each operative.	No. of looms attended by one weaver.
United States .. ..	1,120	9
United Kingdom .. ..	540-600	4-6
Japan .. ..	240	2½
India .. ..	180	2

Note:—The labour employed in spinning in the foreign countries mentioned above is almost exclusively female, whereas in India it is mostly male.

114. (i) As will be seen from enclosure "B" referred to in my remarks under subhead 8, in the earlier stages of our long existence of over half a century, our labour force frequently changed, a complete turnover taking place about every 18 months. But the situation has gradually improved since and the period of complete turnover of our labour force now comes to about eight years. This should, in the ordinary course, ensure increased efficiency; for, steady and continuous attention develops in the worker skill in the particular type of work in hand and gradually increases efficiency. But, in spite of labour having become steady at our mills we have unfortunately no increase in production worth the name. I attribute this result to the seeds of dissatisfaction sown in the minds of workers by outside agitators. There is not that steady attention to work which one ought to expect from shorter working hours and better working conditions now prevailing in factories, and consequently production shows a fall in place of the expected increase.

(ii) The use of machinery as against manual labour ought to lead to increased production equally in the case of Indian and foreign workers. With increased use of machinery there ought to ensue better and more work. For instance, a vacuum stripping plant, such as we have at our mills, ensures greater comfort in the card room and the workers in a room equipped with the plant do really put in more and better work than those in a room not so equipped. Again, the introduction of automatic looms, which is so much favoured in America, is bound to yield to a weaver increased production; for a weaver in America, who used to mind 4 to 6 ordinary looms, now minds 16 to 20 automatic looms, resulting in increased wages for the man. Similarly, a system of runway tracks for haulage such as we have introduced at our mills is bound to expedite work and to add to the general efficiency of the workers.

The efficiency of workers also greatly depends on the kind and workmanship of machinery used. We had mules and throstles in our spinning department in the beginning; but, when the ring spindle was invented, we tested its possibilities and being convinced of its great utility, introduced it in our mills at a time when even Lancashire spinners were looking askance at it. Spinning production became doubled. Thus greater efficiency of the machinery does add to the efficiency of the worker in the way of enabling him to give greater production.

Many years back we had bitter experience of inefficient machinery seriously reducing output. In 1890 we were induced by Messrs. Brooks & Doxey, Textile Machinery Makers, Manchester, to try in our No. 3 mills some of their cards and preparatory spinning frames, which, they assured us, were as efficient as, though cheaper than, cards made by Mr. Elijah Ashworth, Manchester, and preparatory frames made by Messrs. Platt Bros., & Co., Ltd., Oldham, machinery of which latter makes had been in use at our No. 1 mills since many years past and which had given us uniform satisfaction. As Messrs. Brooks & Doxey's proposition was tempting, we ordered their machinery. The cards and preparatory machines supplied by them were worked under identical conditions, but, due to defective casting and poor workmanship there were very frequent breakages of parts of Brooks & Doxey's machines, the replacement of which considerably hampered work and gave much lesser output than the machines of the other makers.

As experience dictates, we have been scrapping out-of-date machinery, and any device or attachment that is reported to be adding to the efficiency of a machine is at once tried by us and adopted if found efficient. As a result of such trials we have found that loose reed looms give more production than fast reed looms. Certain modification in the ordinary looms have made faster running of the looms now possible, resulting in increased production. Some years ago we installed at our mills looms made by Messrs. Henry Livesey, Ltd., Blackburn, which, due to frequent breakages of parts give less production. The broken parts have gradually been replaced by parts made by Messrs. Platt Bros. & Co., Ltd., of Oldham, so that the old Livesey's looms at our mills have now only the sides of Livesey. The loom fitted with Hacking's Drop Box Motions made by Messrs. Hacking & Co., Ltd., of Bury, owing to the peculiar mechanism of the motions, cannot run as fast as the loom fitted with Eccles' Drop Box Motions made by Messrs. Platt Bros., or other makers.

(iii) The more efficient the drive of a mill, the more efficient will be the general working of the mills, and with a view to try and find out the most efficient drive we have three different drives at our mills. The machinery in our No. 2, 4 and 5 mills is driven by electric motors placed on shafts or direct connected to machines and getting electric power from turbo-generators. Electric power is being gradually extended to No. 1 and No. 3 mills also, but steam power is still mostly in use at these mills, the main and line shafts in No. 1 mills being gear driven, while those in No. 3 mills being rope driven. So far as efficiency is concerned, I have found no difference in the three types of drive, viz., gear drive, rope drive and electric drive; but in point of flexibility the last drive has a very great advantage over the other two types.

(iv) In a modern factory owned by a Joint Stock Company the management is dual. There is the manager of the factory who selects the best men available to work as heads of the different departments, and these heads of departments select the best workers for the work of the factory, so that the best results can be achieved. On the other hand, is the firm of managing agents, who are directly responsible to the board of directors of the company. The managing agents in India do what the managing director does in England. They see that the best raw materials and stores are purchased at the most favourable rates and that there is a continuous supply to the factory of raw materials so that the factory is always kept going. They also arrange for disposing of the manufactures of the factory in such a way that the best prices are realized. And the most important part of their duty is the financing of the business.

The manager is selected by the managing agents for his ability, not only to get the most efficient work turned out, but also to keep his labour force contented. As such, he is generally given a free hand in the internal management of the mills. And just as the manager has to keep his labour force contented, so have the managing agents to keep their selling agents, their purchasing agents and the shareholders of the company contented. It is only when an atmosphere of content prevails in all sections of the industry that it can yield the best results. As I have said in my remarks under subhead 10, due to the Empress Mills being over 500 miles away from the office of the managing agents, its mill manager is invested with much wider powers, but he always keeps the managing agents in Bombay in close touch with the mills by regularly keeping them informed of whatever is doing in Nagpur.



The efficiency of the management thus depends upon the co-ordination of the authorities, exercised by the managing agents and the factory manager, and upon the judgment of both. Correct judgment is the highest factor in efficiency; for, misjudgment might sometimes spell ruin for the concern. The efficiency of the workers depends upon the energy and zealotness of the heads of departments. While on this point, I would say that no system of standardization can create efficiency, as I know by experience. We have done our best, but we cannot get our weavers to mind on an average more than one and a half looms per weaver, while in Bombay not only is the average per weaver two looms, but a Bombay weaver produces more cloth per loom than a Nagpur weaver.

(v) Physique has much to do with the efficiency of workers, as our experience shows. The Momins (Mahomedans) and Koshtis (Hindus) who have a better physique than Mahars (low caste Hindus) are more regular in attendance and give better work as weavers. As there is plenty of labour available in Nagpur, we are now not compelled to take up labour as it comes to us, but are able to send away the man whom we find physically unfit for the job he seeks.

(vi) The health of workers plays an equally important part on their efficiency. But it is so difficult to determine from statistics with us to what extent the incidence of sickness affects the efficiency of workers. We have on our muster rolls about 8,800 workpeople, but the average daily attendance is 7,500, which is about the number we need to keep all our mills fully going. Thus we have about 1,300 or 17 per cent. surplus workers. Due to this, our production hardly suffers on account of absent men, as our surplus workers take the place of the absentees. It is practically impossible for us to say from our statement (enclosure "S") referred to in my remarks under subheads 57 and 58, of absenteeism at our mills how many absented themselves on account of sickness or other causes. Also from our statement (Enclosure "K") referred to in my remarks under subheads 24 and 25, showing the number of new and old cases treated daily at our mills' dispensaries, we cannot say if all workers that were treated were not on work. But on the basis of the figures of new cases of workpeople treated at our mills' dispensaries, given in our statement (enclosure "L") also referred to in the above two subheads, the incidence of sickness among our workpeople ranges from 1.23 to 1.46 per cent. of the average daily attendance at our mills during the last five years.

(vii) Education is the most potent factor serving to increase the efficiency of workers, and the main reasons why the efficiency of Indian labour is so much less than that of foreign workers is due to most of the Indian labourers having no knowledge even of the three R's. So far as our own activity in the direction of education is concerned, I think the number of persons who received elementary education at our factory and night schools since we started these schools would be equivalent to about 10 per cent. of our workers on roll. On what measures must be taken to impart education to workers I have given my views under subhead 36. As a matter of interest I may mention here, that the first gleams of light falling on the minds of our juvenile labour through a knowledge of letters have so dazzled them that they are often found reading books, leaving their machines unminded.

(viii) How far improvement in the standard of living affects efficiency I cannot say. I can, however, refer here to the efforts made by Europe and America to have International Conventions on labour problems lest Asiatic countries, with lower standards of living of workers might undersell them, due to lower costs of production. I might also remark that in the present condition of the homes of the Indian workers it is beneficial to their health to have their homes at some considerable distance from their places of work so that they get on the road the fresh air their dingy houses in congested localities are lacking in.

(ix) A temperate climate brightens the mind and impels men to work, and as such has some effect on the efficiency of workers. Unfortunately the climate of India is subject to such extreme variations that the Indian worker is distinctly at a disadvantage in this respect as compared to his European brother. I may also mention here the effects the manipulation of temperature for reasons of production has on the workers. The ventilating and humidifying systems at our mills have been fully described under subhead 23. But I may say here that due to the ventilating and humidifying systems at our No. 1 mills not being so up-to-date as those at our No. 3 and No. 5 mills the comparatively hot atmosphere prevailing at our No. 1 mills, disturbs the evenness of our yarns made therein and also affects our weaving production. Also the workpeople there do not feel so happy as those at our other mills.

115. *Effect on Production, of (i) Changes in working hours.*—I would like to supplement here my remarks made on this subject under subhead (112) by describing an experiment made at our mills about half a century ago. As there was a great demand for our goods which we could not meet, we wanted to increase our

production, and the late Mr. J. N. Tata, the founder of our mills, was keen on working the mills with two shifts, a day shift and a night shift, though the management was sceptical about the success of the experiment. Labour could be easily had for both shifts; only the new men had to be trained for some time. The mills were fitted up with electric lights for night work and the experiment was continued for two years. Both shifts worked for 12 hours with half an hour's rest period and the day and night shift men changed places every fortnight. The result was disastrous; for, the total production of the two shifts did not even equal that obtained by the usual day time working from sunrise to sunset. This was all due to the night shift people not taking rest during the day time as they should and loitering instead and enjoying themselves in public gardens, so that they dozed at night, leaving their machines to mind themselves. And this entailed on the mills great loss due to the waste produced being out of all proportion. Even trained men from Bombay were imported for night shift work, but with no better effect, and as the mills, instead of making profit as they used to do before, made loss, the experiment had to be abandoned.

In this connection I would mention that we have all along favoured reduction in working hours. Even when the law permitted working the mills for 12 hours, in winter when the day is short we worked only from sunrise to sunset, which meant, on an average, 10½ hours' work excluding weekly cleaning time. And we introduced the 10 hour day more than two years in advance of the provision in this regard of the Factories Act in order to keep pace with the growing tendency everywhere to reduce the hours of work of the work people so as to leave them some time for recreation of body and mind. I am in favour of a further reduction in working hours per day, but at present competition is so severe in the markets catered for by us that I cannot all alone think of making any innovation in the direction of reduced hours of work.

I may also say that we found no improvement in efficiency when the working hours were reduced to 12 by the 1911 Act, but that the introduction of the 10-hour day has improved the efficiency in the weaving department, though in the spinning department production has been smaller in proportion to the number of less hours worked than before. The reason for this is that we have been maintaining, for years past, a system of relievers in our spinning department, the workers in which department are all paid at fixed rates, so that whenever a machine tender goes out for smoking or answering calls of nature, the reliever works in his place and the machine is kept running all the time, it being stopped only for doffing purposes or repairs, etc. The relative efficiency of the spinning department for different counts of yarn is thus almost steadily maintained from year to year; and any reduction in working hours naturally brings about a proportionate reduction in production. But in our weaving department where the weavers are paid on piece-work, and in which department we have no such system as is mentioned above, weavers leave their machines less frequently than before and work more energetically for fear of loss of wages due to shorter working hours; and the result is increased production and efficiency.

I understand that in the Svadeshi mills in Bombay and the Ahmedabad Advance mills at Ahmedabad, which are also under the agency of Messrs. Tata Sons, Ltd., like our mills, and where there are more skilled workmen, weavers are able to give in 10 hours the same production that they formerly gave in 12 hours.

(ii) *Changes in other Working Conditions.*—Good light and ventilation and efficient humidification do have an effect on production. In our No. 1 mills, which is our oldest mills, and where conditions of light, ventilation and humidification compare very unfavourably with those in our other mills, though we do not suffer in production so far as the spinning department is concerned, the yarn produced there is not so uniform and even as that produced in our mills built subsequently. In the weaving department, however, deficient light, ventilation and humidification even affect production by about 5 per cent.

(iii) *Expenditure on Health and Sanitation.*—For looking after the health of our workpeople and their children and relatives we have at our mills' four dispensaries, under the charge of qualified doctors, and the expenditure under this head comes to about Rs. 20,000 a year. Full particulars of our welfare work activities can be obtained from a bound volume sent herewith, which contains reports of our welfare work from January, 1922 to June, 1927. I may, however, mention here that the total expenditure we incur annually on all our welfare work activities comes to about Rs. 1 lac. Now, as the average number of daily attendance at our mills is 7,500, the expenditure on welfare work comes to about Rs. 14 per head, or 5 per cent. of our wage bill. I am told that in England good firms spend on welfare work for their workpeople about £2 per head or 2 per cent. of their wage bill, the reason for the smaller percentage being that much welfare work is being done there by local bodies out of the taxes levied there, which are much higher than taxes here.

It is only when a severe epidemic affecting the whole of the town rages in Nagpur that attendance at our mills seriously suffers and our production is affected; for, otherwise in normal times our system of employing spare hands helps us to carry on work and not feel the absence of such workers as are ill, or have gone on leave. Of the incidence of sickness at our mills we have prepared two statements (enclosures "K" and "L") which have been appended to my remarks under sub-head (24).

(iv) *Housing*.—Please see my remarks under sub-head (16). I may add that I cannot say if what we have done for the housing of our workpeople has had any effect on the production at our mills.

(v) *Alterations in Methods of Remuneration*.—In October, 1917, seeing that as a result of the new economic conditions introduced by the World War, prices of the necessities of life had begun to rise, entailing hardship on our workpeople, we began paying them scarcity allowances on the scales mentioned in the following table :—

In force from	Percentage of scarcity allowance over pay.	Remarks.
October, 1917, to January, 1920 ..	10 per cent.	To all workers.
February, 1920, to August, 1920 ..	33½ per cent.	do.
September, 1920, to September, 1924 {	50 per cent.	To fixed-wage earners.
	66⅔ per cent.	To piece-workers.

Besides giving these scarcity allowances, we began supplying our workpeople foodstuffs at pre-war rates and cloth at specially reduced rates. We also gave them the facility of obtaining foodstuffs at our mills' shops on credit up to a limit in proportion to their earnings in exchange for chits issued by departmental heads, the cost of the supply during the month being recovered on pay-day. The system of such supply of grain and cloth at reduced rates, which was continued till September 1924, entailed on our mills an expenditure of Rs. 19·50 lacs. In October, 1924, the wages were consolidated, incorporating therein the scarcity allowances as well as the benefits accruing to the workpeople from supply of grain and cloth at reduced rates.

Other additions to the usual earnings of our workpeople are :—

(a) Monthly full attendance bonus ranging from Rs. 1½ to Rs. 3 per month given to all classes of workers except male employees on piece-work, and artisans such as blacksmiths, masons, carpenters, fitters, turners, etc. In the month of June, 1929, the number of workers, who received such bonus, was 2,699 and the amount paid them came to Rs. 4,392, which works out to about 2·5 per cent. of our total wage bill. I may mention here that a male worker becomes entitled to this bonus, only if he has attended all the working days in a month, but that in the case of female workers two day's absence during the month is condoned to enable her to qualify for the regular attendance bonus.

(b) Long Service Bonus paid as described hereafter. Till September, 1924, such workpeople as had completed 20 years' service were given a monthly increment of Rs. 1½. But as from 1st October, this bonus is being given on the following scale to those operatives whose monthly earnings do not exceed Rs. 60.

If the period of service exceeds 5 years but does not exceed 10 years Re.1 per month; 10 years but not 15 years Rs.1-8 annas per month; 15 years but not 20 years, Rs. 2 per month; 20 years Rs. 2-8. per month.

The following figures of long service bonus earned by our workpeople in June, 1929, speak for themselves :—

Scale of bonus.	No. of workpeople who earned the bonus.	Amount paid. Rs.
Re. 1-0-0	1,526	1,247
Rs. 1-8-0	1,365	1,704
„ 2-0-0	752	1,256
„ 2-8-0	556	1,169
Total ..	4,199	5,376

It will be noticed that there is a difference between the sums actually paid and the sums payable to the workers according to the scales mentioned in column 1 of the statement. The difference is accounted for by the fact that the full bonus is paid only to those workers who are present throughout the month, while others, who are absent for a day or more, receive proportionately lesser amount. I may mention that the total amount of Rs. 5,376 paid to the workers on account of long service bonus works out to 3 per cent. of our total wage bill.

Another item of encouragement we give to our workpeople is in the shape of annual prizes which I have already dealt with under sub-head 32.

These are the measures taken by us to add to the usual wages of our workpeople, but I am afraid I cannot say if all that we have done in this direction has induced in our workpeople a desire to put more energy into their work.

(vi) *Movement in wage levels.*—In my statement (enclosure "T") appended to my remarks under sub-heads 96 and 97, I have given figures of wages at our mills during the different periods of our mills' long existence. I am attaching hereto another statement (enclosure "Z") showing the numbers of piece-workers and the different departments in which they work, from which it will be seen that out of a total of 8,800 workers on roll, 45 per cent. are piece-workers and 55 per cent. are fixed wage-earners. As I have said elsewhere, increase in wages has not tended to bring about any noteworthy increase in the production.

(vii) *Legislative enactments.*—The Indian Factories Act as amended from time to time and the Workmen's Compensation Act have considerably ameliorated the condition of the workers, but I regret to say that the seeds of unrest sown in the minds of workers by evil-minded agitators have implanted in them a desire to get more and more facilities without any effort on their part to put their heart into their work and give more and better production.

(ix) *Alcohol and drugs.*—Though a visit to the grog shop, particularly on pay-day, is indulged in by our workpeople, I can safely say that the drink evil and an addiction to drugs like opium are not so prevalent among our workpeople as to attract attention and to affect the production at our mills.

116. *Possible methods of securing increased efficiency.*—To my mind the efficiency of an industrial worker depends upon three groups of factors.

Under the first group I would place (1) the climate of the worker's country; (2) his physique; (3) his dietary; (4) the sanitation of his dwelling and that of the locality in which he resides; (5) addiction to alcohol and drugs; (6) the amount of education he has received; and (7) the ideas which his education has inspired in him about the dignity of his work.

The second group would comprise (1) the sanitation of the factory where he works; (2) the longer or shorter hours of work he puts in; (3) measures adopted at the factory to reduce industrial fatigue; (4) the adequacy or inadequacy of the wages he gets; and (5) measures taken by the factory owner to help him (a) in sickness, (b) in getting primary education and technical training, and (c) in providing against the rainy day.

In the third group I would place (1) the advantages of use of machinery as against hand work; (2) the benefits of the adoption of the latest improvements in machinery such as would (a) increase output, and (b) reduce the strain of concentration by the worker on the machinery looked after by him.

How far these factors affect efficiency I have tried to explain in my remarks under sub-heads 114 and 115, and I would here make a few further remarks on labour saving appliances inasmuch as such appliances are a potent force in increasing the efficiency of an industrial worker.

Since the ring spindle replaced throstles and mules and revolutionized spinning in the nineties of the last century, there has been no invention of note in the spinning section of the textile industry. But only recently a system promising to do away with one of the preparatory processes of spinning and to make it possible to produce, from the same mixing of cotton, yarn of better quality than can be done with the ordinary spinning frame, has come into vogue in England and the Continent, and has also begun to find favour here. It is known as the High Draft System of Spinning. We, too, have taken trials of the system, and having found that the claims it makes are likely to come true, we are going to take more extensive trials with a view to replacing all our ordinary spinning frames by high draft spinning frames.

In the weaving section the one outstanding improvement, which has found great favour in America is the automatic loom. This loom is, however, looked askance at by English weavers. Even in India and especially in the South, where a few such looms have found their way, they are reported to be unsuitable for Indian conditions

of work and Indian yarns. In Bombay, a few Japanese automatic looms are being tried, but it is too early to form a definite opinion as to their successful working or otherwise, as they have only lately been introduced.

But while automatic looms\* and other labour saving appliances, which involve reduction in the number of workers minding machines, have met with favour in England and America, in our country the workers have expressed in unmistakable terms their resentment at even an increase in the number of spindles and looms allotted to each spinner and weaver respectively as recommended by the Textile Tariff Board, which arrangement would add to the wages of the workers, and at the same time reduce working cost. The Bombay millowners tried to carry out these recommendations, but their workers struck work in consequence, and they had to revert to the old system.

And these are the only directions in which efforts of a sort have been made in India to increase the efficiency of the workers in the textile industry. But there is a direction still absolutely untrodden by the Indian employer. I mean the application to Indian industrial conditions of the principles of scientific management as deduced from a study of industrial psychology. The study and the application of the principles of this new science are reported to have yielded, both in America and in Europe, phenomenal results. Output has been increased, there are fewer accidents in factories and lesser spoiled work, and reduction in working hours has considerably reduced absenteeism. I would like all industrialists in India to combine to bring out experts from England and America to help start an Indian Institute of Industrial Psychology and Industrial Research Board, and I wish the Labour Commission would make a strong recommendation in this direction.

#### XIV.—Trade Combinations.

117. (i) Practically all the mills of these provinces are members of the Bombay Millowners' Association; but while the membership offers them the advantage of being posted up with full information on questions vitally affecting the industry as a whole, the Mofussil Mills cannot possibly expect from that body any help worth the name in times of labour disputes or strikes, labour conditions in the City of Bombay and the industrial centres of these provinces differing so widely. The Mofussil Mills have consequently to settle their own policy with due regard to the local conditions. The establishment of a separate association for the mills of these provinces, however desirable it may be, is not practicable, looking to the comparatively small number of mills, more especially when an attempt, made some 11 years ago, to start a Chamber of Commerce which had the idea of embracing within its fold all the commercial interests of the provinces, failed owing to a poor response from the interests concerned. The only association of employers, of which our provinces can boast, is the Factory Owners' Association which has its headquarters at Khamgaon, but I am not in a position to give any information about this Association.

(ii) An organization of the employed called "The Nagpur Textile Union," with its headquarters at Nagpur, and having about 2,200 members, has been in existence since December, 1927. I am not aware of any other organization of the employed.

118. In the textile trade of the country the Bombay Millowners' Association is one of the most influential organizations of employers. It collects and circulates information and statistics of general professional interest and deliberates on it in an executive committee. It has started its own mutual insurance association to cover the liabilities of millowners under the Workmen's Compensation Act, and intends to provide similar facilities for fire insurance. This is all to the good, but it would meet a greater need if it stood aloof from individual interests and developed into a professional association, and had a general staff of expert specialists like that of the British Trades Unions Congress. Our mills would have been saved much useless litigation if the Millowners' Association, of which we are a member firm, registered trade marks and trade numbers, and the fact of such registration were marked on our manufactures. A member firm of the Association need not be compelled to get its articles registered, but if the fact of such registration were stamped on articles, the buying public would at once understand that an article not so stamped is not a guaranteed article. Incidentally such a system would improve the influence of the Association.

The general staff of the Association in collaboration with the general staffs of labour unions might work out the facts and figures of the industry. The Association might also take up research work, which might disclose new uses and new qualities of the products and new methods of diminishing costs. Thus the Association might in time develop into an independent industrial authority, and be able to impose standards of honour on its members, which would be to the benefit of the trade.

Such an Association might also be able to exercise its influence on monopolistic interests, and to bring them to a reasonable frame of mind. Forty years ago the P. and O. Co. had the monopoly of the shipping of yarn to China, and their charges were so exorbitant that the shippers combined and started a new line of steamers which compelled the P. and O. line to moderate their freight rates from Bombay to Chinese and Japanese Ports. But we have no influential association in our provinces which could compel the G.I.P. and B.N. Railways to bring down their rates. In the absence of water transport and road transport these railways have the monopoly of the carrying trade of our provinces. In theory their rates are so fixed as not to weigh on the trade and thus prove an indirect source of taxation on the consumers, but as the railways in England only lately found out there is room for reduction in rates of freight in order to help industry, which has been in a bad way since so long. It is true, there is an appeal to the Railway Board in the case of State-owned railways, but in the case of a company-owned railway there would hardly be any chance of a response. And I wish the Royal Commission on Indian Labour would see their way to recommend that the railways should consider the question of freights so as to lighten the burden on industry.

Mention of the resentment monopolies invoke in the community reminds me of the burning problem of the day, viz., the general strikes of workers, the aim whereof is to exercise pressure upon reasonable employers to get unreasonable employers to mend their ways. My distinguished father deeply resented in the evening of his days the "slur" as he took it, of his workmen associates going at the bidding of their misleaders on strike in spite of their past relations. I feel as keenly on the point; for, if other employers of labour do not come up to expectations, why should my workmen friends molest me by asking me to bring pressure upon such employers, who are bound to ask me to mind my own business if I put in a word with them on behalf of their workers.

I have spoken above of the sense of honour which an Association like that of the British Trades Unions Congress is bound to develop among its member firms. If such an Association secured the confidence of the community as an independent industrial authority, picketing could be made illegal, as all peaceful persuasion would emanate from impartial authority. One month's notice between masters and men could then be insisted on; for, this notice would give the time for reference of disputes to the Association and investigation by it. With such an Association functioning strikes would become obsolete.

I would in the end say that the conflict between capital and labour cannot now be so very acute as in the olden days in that the control of industries is now in the hands of managing directors and managing agents, who have large blocks of capital of their own invested in the industries controlled by them, and their doings are keenly watched by shareholders' associations and labour unions, so that any abuse of power involves replacement of the directorate or the agency. There are black sheep in every community, and the industrial fraternity cannot be an exception to the rule, but I don't think it fair to condemn a class for the sins of a few of its members.

120. *Individual Trade Unions.*—(i) The first attempt in the direction of forming a union of workers was made by some of the local labour leaders in the year 1921, but without success. The strike of our workmen in the year 1922 encouraged them to make another attempt, but this also proved abortive. The year 1924, however, offered a unique opportunity to the leaders to carry out their object, and they could, directly as a result of the prolonged strike at our mills successfully form what was known as "The Nagpur Labour League." This league was affiliated to the All-India Trade Union Congress. But even after the establishment of the league the leaders were unable to make any headway till the end of the year 1927, when, consequent on the passing of the Indian Trades Union Act, 1926, they dissolved the league and constituted in its place the Nagpur Textile Union, which was registered under the above Act in December, 1927.

(ii) *Attitude of workers and extent of their control.*—As stated in the history of the union, out of 12,000 workers in Nagpur only 2,200 have joined the union. This latter number cannot be considered satisfactory, and is perhaps an index of the ideas about the union of the majority of workers, though those that have got themselves enrolled as members are reported to be displaying keen interest in the affairs of the union.

(iii) *Attitude of employers and relation with them.*—In this connection I give below the following extracts from the union's report for the calendar year 1928, which speak for themselves :—

"The Empress Mills authorities from the very beginning adopted a sympathetic attitude towards the Nagpur Textile Union . . . ."

“ The union has been representing individual cases of the workers to the management of the Empress Mills ; and, though not always successful in the representation of such individual complaints, the union has always received a sympathetic hearing and consideration from the management of the Empress Mills.”

121. *Trade Unions Act, 1926.*—(i), (ii) and (iii) In my remarks under subheads (117), (119) and (120) I have specified the extent to which the Act has been utilized in our provinces in the textile trade. As the Nagpur Textile Union, the nature of whose activities I have described under subhead (119) was registered under the Act only about two years ago, it is difficult to make any remarks on the effect the placing of the Trade Unions Act on the statute book has had on the textile industry. As for possible amendments in the Act I have the following suggestions to make.

Under Section 4 of the Act registration of trade unions is purely voluntary. In the interest and for the protection of the workpeople I think all trade unions should be compulsorily registered.

Section 18 (1) of the Act renders immune from a civil suit any act of any registered trade union or of any officer or member thereof done in contemplation of furtherance of a trade dispute. This constitutes the trade union officers' charter of liberty, but there is no provision in the Act to prevent liberty from deteriorating into license. If an office bearer of a union or a member thereof misappropriated the funds of the union, he can get off scot-free, for the Act has not prescribed any penalty for such misdemeanour. In the English Act not only does such a provision exist, but even the trustees of a union are held liable for the recovery of the union funds only up to the moneys received by them.

Section 22 prescribes that not less than one-half of the total number of officers of every recognized trade union shall be persons actually engaged or employed in an industry with which the trade union is connected. In order to enable the workpeople to have a larger share in managing their own union affairs I suggest that three-fourths of the total number of officers, etc., should be from among the employees in the trade. This suggestion, while not entirely removing any necessary help which the “ outsiders ” can give, will give the majority to the workpeople themselves.

There is nothing in the Act which requires a trade union to keep a record of work done at meetings of its executive committee or of the general body. This is not as it ought to be, and the absence of a regulation in the matter seems to have been felt by the chairman of the Strike Inquiry Court being held in Bombay. When the chairman asked a secretary of a trade union giving evidence before the Court why no records were kept by him of the activities of his union and when the secretary replied that the Act did not require him to keep any such records the chairman said that the absence of records was a point which went against his union. I therefore suggest that the Act might make it compulsory for every union to maintain a minute book.

In view of the experience we have of labour leaders in Bombay who could not have things all their own way in a large union starting rival unions consisting of themselves and a few adherents, I suggest that the number constituting a trade union should be fixed at at least 100.

I suggest the deletion from Sub-section 16 (1) of the words “ and, political ” and of the whole of Clause (e) of Sub-section 16 (2), looking to the bitter experience Bombay has had of Communists and others of their ilk prostituting the legitimate objects of trade unions to further their sinister political propaganda.

#### XIV.—Trade Combinations.

122. *Miscellaneous Questions regarding Trade Unions.*—(i) *Methods of negotiation between employers and employed,* (ii) *Results of attempts at co-operation between employers and employed to increase efficiency of production.*—Negotiations lead to co-operation only when both parties fully understand their responsibilities and when one party is not out to coerce the other party. This can be possible in India only when trade unions are composed of persons that are themselves engaged in industries and there is a Central Labour Office with its provincial branches, whose experts can guide trade unions along the right paths.

For proper functioning of trade unions I think there ought to be separate unions of separate branches of the same class of industries, e.g., there should be one union of engineers, another of those working in card rooms, etc. As conduct of unions means knowledge and understanding, the leaders thereof must not only belong to the industry which they represent, but must have fairly good education. To help in having such a class of trade union leaders the State, municipalities, and the employers associations should contribute towards the education of the workpeople. At present outsiders, who have imbibed from books good, bad, and indifferent theories

of management of industrial concerns, and who have got no practical experience of the inner working of industries, are guiding trade unions with the result that the employers have no faith in such leaders and no real co-operation between employers and employed is possible.

The so-called labour leaders in India do not at all represent labour and are out only to impose their ill-digested theories upon employers, much to the detriment of both labour and the industries.

### XV.—Industrial Disputes.

123. *Extent of Strikes and Lock-outs.*—(i), (ii) and (iii) To the Empress Mills strike of employees was almost an unknown thing during the first four decades of their working, the relations between the employers and the employees having been harmonious and peaceful throughout this long period. But towards the end of December, 1919, a lightning strike, which was the first one in the history of the mills, took place as a result of the poison disseminated among the workpeople by ranting speeches of self-styled labour leaders, and by reports circulated among them by designing mischief-mongers, who had a hand in the strikes of the mill operatives in Bombay. The men had no tangible grievance, and after wandering about for five days returned to work unconditionally. A little delay in declaring the bonus as had been declared in previous years precipitated another strike in December, 1922. Here, again, the men's grievances were all imaginary, and the efforts of the management to bring the workers to a reasonable frame of mind having failed, a lock-out was declared. This had the desired effect; for, after eight days most of the men returned to work, and two days later the attendance became normal. The 30th January, 1924, saw the beginning of the latest strike. In this case, encouraged by designing outsiders, the men put forth unreasonable demands, such as the payment of a bonus in addition to the one already declared by the mills, eight hours of work instead of ten, and the distribution among them of a quarter of the mills earnings. Meetings were held where the men were stirred up not to return to work until all their demands had been met and the deluded workmen kept out for two months. In the end they realized that they had been fed with vain and impossible hopes by the outside agitators, and they began to return to work, the attendance being normal by the 1st April. Thus none of the strikes were due to any real grievances of the workers, who had consequently to take the only wise course of surrendering unconditionally in every case.

(iv) *Loss to industry and workers.*—The subjoined Statement gives the necessary particulars in this regard :—

			Duration of Strike.	Loss to industry. Rs.	Loss to workers. Rs.
1st Strike	..	..	5 days.	1,65,652	16,425
2nd Strike	..	..	9½ days.	1,16,263	39,191
3rd Strike	..	..	60½ days.	5,74,482	2,64,651
Total	..	..	75 days.	8,56,397	3,20,267

125. *Trades Disputes Act.*—Industrial unrest which is only a phase of the world unrest now rampant having culminated in our country in strikes in industries becoming epidemic there was a clamour from several responsible quarters for Government interference. As a first measure Government brought before the Indian Legislature a Trade Disputes Bill which is now in the statute book as the Trade Disputes Act. This Act, empowers Government to appoint a Court of Inquiry when a trade dispute is going on and to call upon the parties to the dispute to refer their differences to the Court. Such a Court has recently been appointed to enquire into the strikes in the Bombay Mills. But the award that it will give will not be binding on either of the parties to the dispute. The purpose of the Act as the framer thereof put it in the "Objects and Reasons" of the Bill is to create active public opinion, the moral pressure of which would compel the party at fault to yield. But, as matters stand at present the hope of public opinion exercising pressure on the disputants has been in vain. In the interests of the industries of the country it would be unwise to allow such a state of affairs to continue indefinitely and measures must be devised to compel die-hards and recalcitrants in industrial disputes to listen to reason. Industrialism having come to stay in the country and trades disputes having begun to assume vast proportions, neither the Government nor the community can now safely



adopt a *laissez faire* policy and active interference by both is necessary. To my mind powers for such interference should be vested in a body to be appointed by the Government on the model of the Indian Tariff Board. It should be in the nature of an *ad hoc* Reference Committee to be brought into existence when a trade dispute assumes serious proportions. Its personnel should comprise capable and experienced men selected from among capable and experienced officers of the Government of India, Departments of Industries and Labour and Commerce, and from among retired eminent legal luminaries. Such a body might be designated the Commissioners for the settlement of trades disputes. The Trades Disputes Act might be amended. It should define the constitution and powers of such a Board and also authorise the Board to start an enquiry into a trade dispute, no matter whether reference is made to it by a party concerned or not. As experience has shown that picketing which is sometimes euphemistically called peaceful persuasion is nowadays the reverse of peaceful and leads to rioting, the Board should have the power to declare picketing illegal. The findings of this Board should be deemed final and binding upon the parties to the trade dispute, and it should have the powers to inflict punishment on those refusing to give effect to its award.

126. *Attitude of Government (i) towards Trade Combinations, (ii) in connection with Industrial Disputes.*—My humble opinion is that Government should keep strictly neutral and do nothing that might be deemed to favour either capital or labour. But when an industrial dispute has gone so far that the public call upon them to look into it, they should go thoroughly into the matter, give their judgment and see to it their decision is given effect to. They should not sit tight as they have done in the case of the red flag movement in Bombay. Two courts of enquiry instituted by them have condemned the activities of the Red Flag Union, but so far the Government have not taken any action against the said union. Perhaps they may still be considering over the matter, but the delay they have made is unconscionable.

I am further of opinion that as the holding of such Court of Inquiry entail a lot of trouble and waste of time, all trade disputes should be referred to a permanent Board such as I have described in my remarks under sub-head (125), who having made a continuous study of the problems involved in trade disputes and having before them all the necessary information ready collected beforehand might give judgment on a particular question very much quicker than the ordinary Court of Inquiry.

## XVII.—Administration.

133. *Central and Provincial Legislatures. Action and attitude on labour questions.*—I have pointed out in my remarks under sub-heads (31) and (49) the iniquities perpetrated by the passing of provincial enactments on questions concerning industrial labour. It is really inexplicable why the factory rules for one province should be more stringent than those for another province, and why there should not be one uniform set of rules for grant of maternity benefits for all provinces. And I am emphatically of opinion that legislation concerning industrial labour should as far as possible take the shape of all-India enactments.

## APPENDIX A.

*Statement showing the principal castes of workers employed, the numbers of workpeople belonging to them and the percentages these numbers form of the total number of workpeople.*

Castes.	Number on rolls.	Percentage.
1. Depressed Class Hindus :—		
Mahars .. .. .	4,795	54.02
2. High caste Hindus :—		
(a) Kunbis and Telis .. .. .	1,249	21.38
(b) Koshtis .. .. .	237	
(c) Gonds .. .. .	215	
(d) Marathas .. .. .	197	
3. Mahomedans .. .. .	779	8.77
4. Other castes .. .. .	1,404	15.83
Total .. .. .	8,876	100.00

## APPENDIX B (abridged).

Statement showing turnover of labour at the Empress Mills, Nagpur, since the year 1908.

Year.	Number on roll on 1st Jan.	New admissions during the year.	Total.	Number on roll on 31st Dec.	Number of hands left.	Average period in months of labour turn-over.	Percentage of labour turn-over.
1908 .. ..	6,322	4,200	10,522	6,401	4,121	19	64
1909 .. ..	6,401	3,724	10,125	6,001	4,124	18	69
1910 .. ..	6,001	3,067	9,068	5,902	3,166	22	54
1911 .. ..	5,902	3,019	8,921	5,622	3,299	20	59
1912 .. ..	5,622	6,365	11,987	7,810	4,177	22	53
1913 .. ..	7,810	5,525	13,335	8,114	5,221	19	64
1914 .. ..	8,114	4,691	12,805	7,985	4,820	20	60
1915 .. ..	7,985	5,161	13,146	8,072	5,074	19	63
1916 .. ..	8,072	4,387	12,459	7,333	5,126	17	70
1917 .. ..	7,333	5,020	12,353	8,252	4,101	24	50
1918 .. ..	8,252	4,165	12,417	8,489	3,928	25	46
1919 .. ..	8,489	2,690	11,179	8,234	2,945	33	36
1920 .. ..	8,234	1,899	10,133	8,140	1,193	48	24
1921 .. ..	8,140	954	9,094	8,214	880	112	11
1922 .. ..	8,214	1,639	9,853	8,651	1,202	86	14
1923 .. ..	8,651	2,023	10,674	8,916	1,758	16	19
1924 .. ..	8,916	2,904	11,820	8,432	3,388	29*	40
1925 .. ..	8,432	2,381	10,813	8,757	2,056	51	23
1926 .. ..	8,757	1,727	10,484	8,843	1,641	64	18
1927 .. ..	8,843	1,257	10,100	8,782	1,318	79	15
1928 .. ..	8,782	1,278	10,060	8,934	1,126	95	12

\* There was a strike at our mills for two months in the year 1924.

## APPENDIX C.

*Statement showing the lengths of service put in by the workers of the Empress Mills as at the 30th April, 1929.*

Period of service in years.	Number of workers who put in the period of service shown in the preceding column.	Percentage on total number of workers on roll.	Period of service in years.	Number of workers who put in the period of service shown in the preceding column.	Percentage on total number of workers on roll.
Under 1 year's service :			B. F.	8,633	97.16
1	507	5.71	26	39	0.44
2	897	10.09	27	35	0.39
3	939	10.57	28	35	0.39
4	813	9.16	29	18	0.20
5	743	8.36	30	19	0.21
6	705	7.93	31	19	0.21
7	380	4.28	32	10	0.11
8	278	3.14	33	12	0.14
9	221	2.49	34	11	0.12
10	420	4.73	35	7	0.08
11	371	4.17	36	2	0.02
12	361	4.06	37	5	0.06
13	353	3.97	38	8	0.09
14	213	2.40	39	6	0.07
15	194	2.18	40	7	0.08
16	180	2.03	41	5	0.06
17	235	2.64	42	—	—
18	163	1.83	43	8	0.09
19	118	1.33	44	1	0.01
20	138	1.55	45	2	0.02
21	71	0.80	46	2	0.02
22	75	0.84	47	—	—
23	66	0.74	48	1	0.01
24	65	0.73	49	—	—
25	67	0.75	50	—	—
	60	0.68	51	2	0.02
C. O.	8,633	97.16	Total	8,887	100.00

Average period of service put in by a worker :—7.89 years.

## APPENDIX J.

*Statement showing the number of births recorded at the Empress Mills in connection with their Maternity Benefit Scheme for their women employees and number of infants who died within two months after birth.*

Calendar Year.	Number of infants born.	Total number of infants who died within two months after birth.
1924 .. .. .	156	21
1925 .. .. .	151	24
1926 .. .. .	174	22
1927 .. .. .	197	28
1928 .. .. .	199	32
Total .. .. .	877	127
Average .. .. .	175	25

## APPENDIX " K."

*Statement showing the number of new and old cases treated at the Empress Mills' four Dispensaries during the year ending 30th June, 1928.*

	Men.	Women.	Total.
No. of employees treated daily .. .. .	178	68	246
No. of employees' relatives treated daily .. .. .	35	133	168
Total No. of patients treated daily .. .. .	213	201	414
No. of cases of employees treated during the year	55,002	21,012	76,014
No. of cases of employees' relatives treated during the year.	10,815	41,097	51,912
Total No. of cases treated during the year .. .. .	65,817	62,109	127,926

## APPENDIX "L."

Statement showing the number of new cases of various diseases treated at the Empress Mills' Dispensaries during the year 1928.

Diseases.	No. of cases treated.	Percentage on total cases treated.
Diseases caused by infection:—		
Dysentery .. .. .	139	·41
Enteric fever .. .. .	22	·06
Influenza .. .. .	848	2·49
Malaria .. .. .	773	2·27
Mumps .. .. .	22	·06
Other fevers .. .. .	1,406	4·14
Gonorrhoea .. .. .	64	·19
Syphilis .. .. .	17	·05
Soft sore .. .. .	13	·04
Tuberculosis .. .. .	—	—
Cholera .. .. .	—	—
Pneumonia .. .. .	—	—
Plague .. .. .	1	·00
Small-pox .. .. .	—	—
Rheumatic fever .. .. .	1	·01
Other infectious diseases .. .. .	—	—
Diseases due to animal parasites, viz. :—		
Round worm .. .. .	67	·20
Thread worm .. .. .	27	·08
Hook worm .. .. .	—	—
Guinea worm .. .. .	—	—
Diseases of the nervous system .. .. .	290	·85
"    "    eye .. .. .	945	2·78
"    "    ear and nose .. .. .	902	2·65
"    "    throat .. .. .	504	1·48
"    "    circulatory system, piles .. .. .	41	·12
Diseases of the blood :—		
(a) Anaemia .. .. .	20	·06
(b) Debility .. .. .	84	·25
Diseases of the respiratory system .. .. .	1,677	4·93
"    "    teeth and gums .. .. .	1,054	3·10
Diseases of the digestive system :—		
Colic .. .. .	564	1·66
Constipation .. .. .	2,974	8·75
Diarrhoea .. .. .	314	·92
Nausea and vomiting .. .. .	78	·23
Indigestion .. .. .	67	·20
Dyspepsia .. .. .	521	1·53
Headache .. .. .	1,229	3·62
Other diseases of the digestive system .. .. .	425	1·25
Diseases of the skin .. .. .	7,391	21·74
"    "    urinary system .. .. .	169	·50
"    "    male genital organ .. .. .	20	·06
All other diseases .. .. .	4,574	13·46
Injuries .. .. .	105	·31
Other surgical cases .. .. .	5,947	17·49
Obstetrical cases .. .. .	—	—
Diseases of women .. .. .	701	2·06
Total No. of new cases treated during the year ..	33,996	100·00

## APPENDIX " S."

*Statement showing percentage of absenteeism among the workers of the Empress Mills during the years 1914 to 1918 and 1924 to 1928.*

Calendar Year.				Average No. of workers.			Percentage of absenteeism.
				Present per day.	Absent per day.	Total on roll.	
1914	..	..	..	6,788	1,305	8,093	16
1915	..	..	..	6,478	1,376	7,854	17
1916	..	..	..	6,383	1,372	7,755	18
1917	..	..	..	6,777	1,268	8,045	16
1918	..	..	..	7,073	1,415	8,488	17
Total				33,499	6,736	40,235	
Average				6,700	1,347	8,047	16.74
1924	..	..	..	7,271	1,447	8,718	17
1925	..	..	..	7,286	1,386	8,672	16
1926	..	..	..	7,478	1,393	8,871	16
1927	..	..	..	7,568	1,360	8,928	15
1928	..	..	..	7,470	1,476	8,946	16
Total				37,073	7,062	44,135	
Average				7,415	1,412	8,827	15.99

## APPENDIX "T."

Statement showing Wages of Skilled and Unskilled Workers in the Empress Mills during the years 1913, 1918, 1920, 1924, and 1928.

	Rates of wages in force during the years									
	1913.		1918.		1920.		1924.		1928.	
	Minimum Wages.	Maximum Wages.	Minimum Wages.	Maximum Wages.	Minimum Wages.	Maximum Wages.	Minimum Wages.	Maximum Wages.	Minimum Wages.	Maximum Wages.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Skilled labour.</i>										
Engineering department—										
Blacksmith :										
1st class } .. ..	30	40	33	55	60	90	{ 77 92	77 92	77 92	77 92
2nd class } .. ..	30	40	33	66	60	90	{ 62 77	62 77	62 77	62 77
Fitter .. ..	30	40	33	55	60	90	62 122	62 122	62 122	62 122
Turner .. ..	30	40	33	55	60	90	62 92	62 92	62 92	62 92
Moulder .. ..	20	30	22	33	45	75	47 77	47 77	47 77	47 77
Tinman .. ..	20	30	22	44	45	75	47 77	47 77	47 77	47 77
Stoker or boilerman .. ..	10	15	11	16	22	30	24 32	24 32	24 32	24 32
Boiler cleaner .. ..	9	10	10	11	15	19	17 21	17 21	17 21	17 21
Oiler .. ..	10	12	11	13	18	22	20 24	20 24	20 24	20 24
Spinning department—										
Spinning piecer .. ..	8	9	10	13	15	19	15 21	15 21	15 21	15 21
Spinning doffer .. ..	7	8	9	10	12	13	14 15	14 15	14 15	14 15
Frame tenter .. ..	12	16	13	20	20	30	20 29	20 29	20 29	20 29
Reeler (winder) woman .. ..	5	10	5	11	8	17	9 17	10 17	10 17	10 17
Weaving department—										
Warper .. ..	13	20	14	26	22	40	21 38	21 38	21 38	21 38
Sizer .. ..	10	18	11	20	18	37	20 39	20 39	20 39	20 39
Weaver .. ..	15	24	13	29	20	43	22 50	22 50	22 50	22 50
Finisher .. ..	8	15	9	16	15	30	17 32	17 32	17 32	17 32
Dyeing and bleaching department—										
Turkey red dyer .. ..	8	9	10	18	13	18	15 20	15 20	15 20	15 20
Indigo dyer .. ..	9	12	13	18	18	24	20 26	20 26	20 26	20 26
Bleacher .. ..	9	11	11	16	15	22	17 24	17 24	17 24	17 24
Cloth dyer .. ..	9	12	13	18	18	24	20 26	20 26	20 26	20 26
Miscellaneous department—										
Carpenter :										
1st class } .. ..	20	30	22	36	37	60	{ 47 62	47 62	47 62	47 62
2nd class } .. ..	20	30	22	36	37	60	{ 39 47	39 47	39 47	39 47
Cobbler .. ..	9	16	11	22	22	45	24 47	24 47	24 47	24 47
Mason :										
1st class } .. ..	25	35	27	49	37	67	{ 54 69	54 69	54 69	54 69
2nd class } .. ..	25	35	27	49	37	67	{ 39 54	39 54	39 54	39 54
<i>Unskilled labour.</i>										
Messenger .. ..	6	9	7	10	—	—	—	—	—	—
Coolie (man) .. ..	9	12	10	13	13	22	15 29	15 29	15 29	15 29
Coolie (woman) .. ..	5	—	5	—	9	12	11 14	11 14	11 14	11 14
Watchman .. ..	8	15	10	22	15	37	17 39	17 39	17 39	17 39



## APPENDIX "F."

Statement showing production per spindle per hour, charges per lb. up to spinning point, of Yarn and efficiency in the Spinning

Department during the years 1900, 1910, 1914, 1921 and 1928.

Years.	1900.				1910.				1914.				1921.				1928.			
Average actual hours worked per day during the year, excluding weekly cleaning time.	11·86 hours.				11·60 hours.				11·28 hours.				9·79 hours.				9·74 hours.			
Count Numbers.	Production per spindle per hour.	Charges per lb.	Percentage of efficiency.		Production per spindle per hour.	Charges per lb.	Percentage of efficiency.		Production per spindle per hour.	Charges per lb.	Percentage of efficiency.		Production per spindle per hour.	Charges per lb.	Percentage of efficiency.		Production per spindle per hour.	Charges per lb.	Percentage of efficiency.	
Reeling Yarns—																				
12s ..	1·257	9·588	87		1·099	11·076	86		1·143	10·922	86		1·127	20·900	87		1·105	20·740	88	
20s ..	·670	14·765	88		·654	16·771	83		·652	17·177	87		·647	33·647	83		·649	33·001	83	
Warp Yarn—																				
32s ..	·318	28·718	92	} American Cotton.	·294	36·196	88		·360	30·370	92		·316	54·900	86		·323	53·992	84	





## APPENDIX "Z."

Statement showing the number of piece-workers on roll (on 30th April, 1929) and the different departments in which they are employed at the Empress Mills.

Occupations.	No. of workers on roll.
Cotton pickers .. .. .	172
Drawing tenters .. .. .	161
Slubbing tenters .. .. .	46
Inter tenters .. .. .	85
Roving tenters .. .. .	159
Reelers .. .. .	686
Knotters .. .. .	12
Bundlers .. .. .	10
Winders .. .. .	448
Warpers .. .. .	65
Drawers .. .. .	55
Weavers .. .. .	2,037
Thread spinners .. .. .	13
Tenters .. .. .	8

Total No. of piece-workers on roll .. .. 3,957

	Percentage.
No. of piece-workers as per details above = 3,957 ..	45
No. of fixed-wage earners .. .. = 4,844 ..	55
Total on roll .. .. = 8,801 ..	100

## APPENDIX "B 1."

Statement showing average earnings per operative per day at the Empress Mills, Nagpur, during the pre-war and post-war periods.

Departments.	From 1st July, 1913 to 30th June, 1914.			From 1st July, 1924 to 30th June, 1925.		
	No. of operatives employed.	Average earnings per operative per day in annas.	Amount of earnings per day.	No. of operatives employed.	Average earnings per operative per day in annas.	Amount of earnings per day.
			Rs.			Rs.
(1) Spinning department—						
(a) Males .. ..	2,063	6·064	782	2,415	11·733	1,771
(b) Females .. ..	880	3·801	209	847	7·324	388
(c) Boys .. ..	1,238	2·510	194	603	4·104	155
(d) Girls .. ..	253	1·702	27	14	3·941	3
(2) Weaving department—						
(a) Males .. ..	2,090	8·229	1,075	2,387	16·705	2,492
(b) Females .. ..	239	3·819	57	428	6·802	182
(c) Boys .. ..	33	1·881	4	12	3·597	3
(d) Girls .. ..	23	2·501	4	1	2·567	—
(3) Dyeing and Bleaching Departments—						
(a) Males .. ..	202	6·194	78	295	13·578	250
(b) Females .. ..	134	3·137	26	135	6·693	56
(4) Other departments—						
(a) Males .. ..	798	7·200	359	1,036	14·138	915
(b) Females .. ..	41	3·163	8	65	7·586	31
Total .. ..	7,994	5·650	2,823	8,238	12·131	6,246

## SUMMARY.—

Year.	Average earnings per operative per day. Annas.
1913-14 .. .. .	5·650
1924-25 .. .. .	12·131

Percentage of increase in the average earnings for the year 1924-25  
over those for the year 1913-14 .. .. . 121

## APPENDIX "C. 1."

*Comparative Statement showing rates ruling in 1914 and 1924  
for necessities of life of labour classes.*

	In 1914.	In 1924.	In- crease.	Table of weights and measures.
	Rs. as. p.	Rs. as. p.	per cent.	
Grain :—				
Rice per candy ..	27 0 0	29 0 0	7	160 Paelis = 1 Candy.
Wheat per candy ..	22 0 0	25 0 0	14	" " "
Dals per candy ..	23 0 0	27 0 0	17	" " "
Salt per maund ..	3 0 0	3 12 0	25	20 Chhks = 1 Paeli
Chillies per maund ..	11 0 0	14 8 0	32	32 Paelis = 1 maund.
Oil per keg of 36 lbs. ..	15 0 0	12 1 6	—19	82 lbs. = 1 maund.
Fuel per maund ..	0 5 9	0 10 8	85	28 Chhks = 1 paeli.
Kerosene oil per bottle ..	0 1 3	0 2 6	100	= 3½ lbs.
Cloth as per details given below	2 8 6	3 0 0	16	40 seers = 1 maund.

Percentage of average increase in 1924.. .. . 30·8

## CLOTH.

Annual requirements for a Mahar family of 4 (1 male, 1 female and 2 children). Cost on the basis of prices ruling in 1924.

	Rs. as. p.
1 pair dhoty .. .. .	6 0 0
1 fenta .. .. .	1 8 0
2 koortas, 3 coats .. .. .	9 0 0
2 saris .. .. .	8 4 0
2 cholies .. .. .	2 0 0
Cloth for children .. .. .	8 0 0

Total .. .. . 34 12 0

Say .. .. . 36 0 0

∴ Expenditure per month for clothing in 1924 would be .. 3 0 0

As cloth prices were about 16 per cent. lower in 1914 than those in 1924, expenditure per month for clothing in 1914 would be .. .. . 2 8 6

LETTER FROM SIR S. B. MEHTA, KT., C.I.E., TO R. N. BANNERJI, ESQ.,  
I.C.S., DIRECTOR OF INDUSTRIES, CENTRAL PROVINCES, NAGPUR,  
dated the 4th August, 1929.

In forwarding the enclosed replies to the draft questionnaire of the Royal Commission on Indian Labour, may I urge the importance of not losing sight of the object of the Royal Commission? That object is to discover some outlet from the present impossible inter-relations between the many factors of production. Industry is now a whole whose health everywhere is affected by the *malaise* of the remotest parts; steel workers fraternising in and helping to prolong a transport strike would be helping to prolong the interruption to their own employment, and to prevent improvement of their own condition. It has to be borne carefully in mind that the Commission has to deal not with industries but with industry, and that as said above, industry is a whole. In fact employers and employed have shown their recognition of their inter-industrial kinship by instituting employers' federations and trades unions. In the course of attempts by these bodies to regulate their mutual relations, lock-outs and strikes ensue. And as there is a soul of good even in things evil, these lock-outs and strikes, which are harmful to the healthy life of industry, have this soul of good in them that they help to discover the weak points of both employers and employed. But all well-wishers of industry should see to it that lock-outs and strikes do not become a vicious habit, as they seem to have now become. The situation has become so intensified that even arbitration boards, conciliation committees, workmen's departmental committees, or *ad hoc* reference committees have failed to bring about a reconciliation. It has been suggested that the arm of the State should enforce the awards of these committees, but to me the remedy seems worse than the disease; for, it is well known that unwilling workers who rejoin work after a strike, give very small production. The only solution of the problem seems to me to enlist goodwill all round, and as this can only be very slowly established, a beginning should be made in this direction by devising provisional measures that can find favour with both sides to the dispute. The enlisting of universal goodwill being a vast problem, it can only be gradually envisaged, the discovery and analysis of facts on which the proposals of remedy depend must take time, such remedies will not be evident, many blunders will be made in the process of determining the remedies and in the light of results and of progress of thought and machinery remedies at work will have to be unflinchingly modified. If the Commission consider this as the *main* problem, to the unravelling of which all its other researches have to be contributory, its recommendations will be all the more practical.

Both employers and employed can help the Commission in working out the problem, because they have inside knowledge of industry; for, I take it that all genuine lovers of industry are imbued with a desire to stamp out the present-day prolonged and repeated interruptions of industry, which menace not only industry, but the community feeling which alone lends worth to our civilization. To my mind employers and employed can help in the following way. The Government of India, Departments of Industry, Commerce and Labour might invite large organizations of employers and employed, like the Railway Board, the Chambers of Commerce, the millowners' associations, trade unions, labour unions, etc., to a conference to submit suggestions for the improvement of the existing tense situation. The suggestions received might then be discussed in a conference and the well-considered proposals that ensue from the conference might be placed before the Commission.

To my mind the causes of the present discontent are (1) the feeling among the workers that the factory system is unsuited to their strength and habits of mind, and (2) the disgust of the employers that the worrying problems of technique, costs and marketing has to be added the duty of suiting men to the jobs and of devising ways of reducing cost. The variegated largeness of a factory demands a co-ordination of departments, and economy of working demands a synchronizing of departments and punctuality of supply by them. These entail on the workers strenuousness of work and regularity of hours, which impose a strain on mind, body and temper. And this strain is aggravated by the incidence of slum-dwelling in large towns. And workpeople have a tendency to adapt themselves to this strain by taking French leave and strikes look lucky means of relaxation. But what most stimulates present discontent is the precariousness of factory work, which is upset by vicissitudes of trade, change of processes and of uses of products and taste of consumers. Also, workers do not appear to participate in the gains of lucky booms, while in depression they are asked to submit to lower earnings. The factory system must, therefore, grow in quantity and variety to find stable and permanent work for the labour classes.

But the factory system having come to stay among us, it must be regulated, and remedies must be found to settle the present discontent. The health of industry

is in the harmonious co-operation of all its factors, and this co-operation is interrupted by the shortage or over-supply of any factor. The need then is to determine the problem of remunerations and conditions of work. But as no factor of industry is disinterested enough or able enough to claim the settlement of questions which arise, there should be an organized collection of facts and weightment of facts. Staffs of the most brainy men that can be discovered, and who would be recognized as impartial between the various interests, might be entrusted with the task. Boards of such men should be continuous boards with experience behind them in adjudication, experts alike in creating and revising precedents, and with eminence to achieve in an unexplored field.

I put down here some remedies that suggest themselves to me. I think means should be devised to speed up the practice of the worst industry to the level of the best in the matter of conditions of work; for action in this matter by separate industries tends to pull down conditions to the level of the worst. Then earnest attention should be given to the abatement of the strenuousness of work which compels refuge in French leave and welcome of strikes. The present hours of continuous work in a factory are more than Indian physique can stand, and introduction of labour-saving machinery will be welcomed if the saving of labour be given, not in reduction of men, but in reduction of hours of work. There are also the methods of shifts which enable the employment of men for smaller number of hours and the keeping the factory at work for a larger number. Also, reserves should be systematically built up by factory owners against emergencies. And it seems to me that the board of experts I have mentioned above should be constituted into a regulating authority and should have the following powers.

The regulating authority should be given free access to the secrets of business and have the right of a comprehensive public audit of any factory. It should point out to the factory owners what they are wanting in and what they should do, and in cases where it finds that through incapacity or perversity owners will not mend their ways, it will publish their shortcomings. To the same authority should be committed the investigation of questions of the capacity of industries to sustain reserve funds and benefit funds and improvement of conditions of workers. It shall also have the power to persuade the institution of such funds where they can, but do not, exist. And on reference being made to it the same authority will recommend whether wages and conditions of work do need improvement or modification. This it will do in the interests of the community and in the light of its own studies and of the practice of other countries. Its procedure will be more informal than that of arbitrators and even Commissions, the proceedings will not be public, no witnesses or counsel or addresses would be permitted, and no precedents quoted before it would be allowed to be deemed conclusive, but will only serve as guides. The written representations of the parties to a trade dispute would be studied by it, and writers invited to separate conferences to see what they are agreeable to modify in the light of first impressions. Then the final representations would be exchanged between the contenders. This will be followed by a general conference, as a result of which a written judgment would be handed over to the parties for written suggestions to be made by them with reasons for the changes they would like to be made. The authority would consider these suggestions and then a final judgment would be published. To take account of lapse of time, judgment might be given retrospective effect.

With such a machinery, legislation might make illegal any lightning strike and any walk-out or dismissal without a month's notice, except for cause shown and approved by the authority; also picketing during strike, since the judgment of the authority provides the only legitimate "peaceful persuasion." Legislation would also confiscate all private pecuniary or other help to strikers defying the judgment of the authority and would give police help to replace those who are so defiant. Any trade union unwilling or unable to enforce compliance with the judgment of the authority would be illegal and cease to exist. The recalcitrant workmen would also lose the benefit of funds and deposits in their favour. As the authority would inevitably be local, vocational and central, reference to the central might be permitted in case of strong dissentient feeling.

With such an authority working, pressure could be brought to bear upon refractory factory owners in various ways. They would be compelled to pay their workmen one month's pay in lieu of notice. Employers in other industries would be called upon to expel from their councils men so defiant. And the public and the Government might ostracise such men.

I might say in the end that an authority with such delicate functions has to be independent of Governments and employers and employed, of elections and nominations, and its composition has to be most carefully considered.

## THE CENTRAL PROVINCES AND BERAR MINING ASSOCIATION.

**I.—Recruitment.**

1. *Origin of Labour*.—Sixty to 70 per cent. imported and 30 to 40 per cent. drawn from local sources.

(i) The labour is not of a migratory nature, but is seasonal to a limited extent of 15 to 50 per cent.

(ii) Such streams of migration as exist are caused by the coming and going of recruited labour through agricultural work, other works and festivals.

(iii) No particular change.

2. *Contact with Villages*.—(i) Thirty per cent of the labour returns to its villages yearly on leave of from four to twelve weeks.

(ii) Permanent force consists of monthly paid servants varying from 10 to 15 per cent. of the total, and about 50 per cent. of the recruited labour.

3. *Methods of Recruitment*.—(i) By contractors through their mucedams or sirdars, who get in touch with villages and districts where it is known that labour is available, and recruit them by families as far as possible.

(ii) No improvement suggested.

(iii) (a) Not desirable, (b) not required.

4. Extent and effects negligible in that wherever possible complete families are recruited.

6. Recruitment for Assam ought not to be allowed in other industrial districts or in any district where there is shortage of labour.

7. (i) Since the beginning of the industry there has been little unemployment due to shortage of work or excess of labour. Should, however, the cost of production of ore continue to increase with market prices remaining at their present low figures, the industry will no doubt have to face this question of unemployment. It is partly for this reason that the industry has applied for a reduction in railway freights on manganese ores to ports. Labour at collieries is short.

(ii) (a) Where retrenchment has become necessary, the object has been obtained by less recruitment. No dismissals have taken place except in the case of low grade mines, which have recently been compelled to close down on account of market depression. (b) and (c) Nil.

(iii) By reducing railway freights and discouraging indiscriminate taxation by local bodies.

(iv) Unnecessary and not practicable.

(v) Unnecessary.

8. (i) The average duration of employment in any one year for the whole of a labour force is 9 to 10 months continuously; the remaining two or three months are usually occupied by approximately 30 per cent. of the labour force in returning to their villages for seasonal cultivation. Normally, the bulk of these return after completion of the cultivation.

(ii) Nil.

(iii) (a) Daily labour attendance on most mines decreases by 50 per cent. on the day immediately following the weekly bazaar day; the other causes are leave, sickness, Pujas and marriages. (b) Mainly seasonal, except those noted in (a). (c) Owing to widely varying condition this cannot be ascertained, but it is undoubtedly considerable.

**II.—Staff Organization.**

12. *Recruitment and Training of Supervising Staff—Superior and Subordinate*.—

(i) No special method is employed, as there is a plentiful supply of the class of men required. Applicants are appointed by mine managers, who after training them place them in grades according to the men's abilities.

(ii) Training is by daily teaching on the work by the mine manager; promotion within grades is limited by the ability of the workmen to carry additional responsibility.

13. *Relations between Staff and Rank and File*.—(i) No trouble or disputes have been experienced between labour and staff. General relations between staff and rank and file are excellent. Invariably, only one European engineer is resident at each considerable mine, and is in daily close touch with his labour force, to whom he is often general adviser and helper in various private matters apart from work affairs. Strikes have been non-existent and quarrels and disturbances between mine managers and rank and file are unknown.

14. (i) Timekeeping in the sense that it is understood in a factory as a check on unpunctuality, is impracticable and unnecessary on manganese mines. Daily

attendance registers are kept by foremen appointed for the purpose and checked by mine managers. With regard to piece-work, all measurements of excavations are made by mine managers' assistants and checked by mine managers.

(ii) Payments are made either by or in the presence of mine managers to contractors for contract work and to labourers direct in other cases.

15. *Contractors as Intermediaries.*—(i) All excavations in manganese mines or any other possible work is let out on contract. In some coal mines, both Sircari and contract work is in vogue.

(ii) In a few cases the contract is sub-let to petty contractors, who are not recognized by the employers.

### III.—Housing.

16. *Extent to which Housing is provided.*—(i) Entirely.

(iv) Nil, with exception of the labour, who do not wish to live in pucca houses and prefer to build their own kutcha huts.

18. *Nature of Accommodation provided in each Class.*—(i) Houses provided are at least equal to those that the labourers normally occupy in their villages.

(ii) Quarters now being built both for labourers and Indian staff are in every way suitable from the health point of view and compare favourably with the usual village type. They are so built that they can be cleaned cheaply and with ease.

(iii) Outside street lighting is not provided; in some cases an allowance for oil is made to the subordinate staff. A gang of sweepers is employed according to the strength of the force for the camp and also for the bungalows of the subordinate staff. Ample water is supplied for drinking purposes from wells and pumps.

20. Rent rates in various classes. No rents charged.

### IV.—Health.

23. (i) Mortality figures for the mining industry as a whole are not available. From statistics from certain mines, mortality varies from 12 to 18 per 1,000.

(ii) From the same source birth rate is given as 13 per 1,000 per annum. Infant mortality is 20 per cent.

(v) Generally speaking, the physique of workers is good.

(vi) This is not particularly noticeable in mining labour camps, as complete families are recruited as far as possible.

24. (i) Qualified medical officers and assistants with well equipped dispensaries are provided in each considerable mine.

(ii) A public vaccinator with vaccines for plague and outfits for inoculation is supplied free by Government.

(iv) Emergency maternity cases are usually treated by the qualified mine doctors. In one mining district, where three large adjacent mines form a convenient centre for the purpose, experiment is being made by employing a trained maternity nurse with assistants.

There are no women doctors actually employed, but outside women doctors are employed when necessary, and also advantage taken of women hospitals to which the companies subscribe.

25. *Extent to which Medical Facilities are utilized.*—(i) Very fair and improving year by year. (ii) Women do not take as much advantage of the facilities provided as men but it is much better now than some years ago.

26. (i) Experimental latrines have been tried on several mines, but have not been successful; having regard to the general situation of the mines and the long established habits of the workers themselves, the present arrangements are less likely to be a menace to public health than an inefficient latrine system.

(ii) Pucca wells are provided for adequate supply of water.

(iii) Masonry tanks are provided on some mines.

29. (i) All mines are free from industrial diseases.

(ii) There are occasional outbreaks of cholera and malaria, dysentery and other intestinal diseases usually occur during the rainy season.

30. (iii) Difficulties arising from non-acceptability of western medicines are not great, and are much less than some years ago. They can only be overcome by demonstration, persuasion and successful result of treatment, which is being accomplished.

There is no paucity of medical men and the finance arranged by the mining companies is sufficient.

31. There is no scheme in existence at present. The Central Province and Berar Mining Association consider that if the scheme of maternity benefits now before the Central Provinces Government is introduced, the benefits under it should not be available to any woman who has not regularly resided in a mine camp for at least 12 months, and that maternity benefits should not commence until three weeks before child birth or extend beyond three weeks after child birth.

#### V.—Welfare (other than Health and Housing, but including Education).

34. (i) Shelters and creches have been provided by some employers. Provision for refreshments is unnecessary, as the workers who live close to the mines take their meals and refreshments in their own houses.

(ii) Areas are set aside on most mines for games for the labourers and staff, the necessary equipment being supplied by the companies. Occasional visits are received from variety entertainers and performances arranged by subscriptions, given either by contractors or the resident mine manager.

At some of the larger festivals, largesse is distributed by most companies to the workmen.

37. *Desirability and Possibility of Provision for Old Age and Premature Retirement.*—Not practicable for mining.

38. *Co-operation.*—Not practicable for mining.

39. *Possibility and Desirability of a Statutory Miners' Welfare Fund.*—Not practicable for mining.

#### VI.—Education.

40. (i) Elementary schools are provided for children of school age living in mine camps and are used approximately by 50 per cent. of the children living in camp, and also by children from closely adjacent villages.

#### VIII.—Workmen's Compensation.

51. (iv) Availability and use of insurance facilities are reduced by high premiums charged. Value from workers' point of view is that they would receive the payments to which they are entitled.

(v) Compulsory insurance would impose too heavy a burden on an already very depressed industry, and having regard to the fact that all claims have been met, we think compulsory insurance is not desirable.

#### IX.—Hours.

##### B.—Mines.

63. *Hours worked per day and per week :—*

(i) 6½ to 9 hours per day and 39 to 54 hours per week, according to class of work.

(ii) Ditto ; overtime not worked.

64. 6 days per week.

66. *Possibility of reducing maxima.*—Unnecessary.

67. *Suitability of the law relating to shifts.*—No alteration suggested.

68. *Possibility of introducing an effective daily limitation.*—Unnecessary.

69. *Intervals.*—

(i) No restriction on labour for taking intervals for fatigue.

(ii) No restriction on labour for taking intervals for meals.

(iii) Paid holidays, none except to monthly paid men. Unpaid vary from 18 days and upwards according to local festivals.

70. *Day of rest.*—Bazaar day weekly.



**X.—Special Questions relating to Women, Young Adults and Children.****B.—Mines.**

90. *Effect of Act of 1923.*—Appears to provide suitable provision for a difficult subject.

91. *Exclusion of women* :—

(i) Suitable.

(ii) The exclusion of women from underground working has increased costs. Any extension of regulations to exclude women from opencast mines would be disastrous to manganese mining industry. The women on the mines form a large percentage of the labour force, and are in all cases employed on work suitable to them and not suitable to men.

(iii) Would be disastrous to workers for reasons given in (ii). Usually work is by families and income of joint families would be reduced. Moreover, men object to engaging in any work which entails leaving their women folk elsewhere.

(iv) Sufficient consideration has not been given to manganese mines, and the period laid down to withdraw from coal mines is none too slow.

**XII.—Wages.**

96. Prevailing rates of wages (time and piece) and average earnings :—

(i) Unskilled daily wage	Men	As. 7	to	As. 12	per day.
	Women	" 4	to	" 6	"
Skilled labour	Men	" 12	to	Rs. 2	"
Contract labour	Men	" 10	to	" 3	"
do.	Women	" 5	to	As. 12	"

(ii) Average earnings As. 7 for men and As. 4 for women.

97. (i) There was in manganese mines an increase of approximately 25 per cent. from 1914 to 1919, and from 1919 to 1927 there has been a further increase of 25 per cent. In coal industry in this period wages have increased even more.

100. Approximately 30 to 80 per cent. of the workers are paid through the contractors, and this payment through contractors represents approximately 30 to 80 per cent. of the monthly payment to workers.

Regarding the effect, this arrangement has proved generally satisfactory.

104. The effect of any increase in the scale of wages tends to give poorer labour attendance.

105. (i) Working conditions on the different mines vary so widely that we consider the statutory establishment of minimum wages would be not only inadvisable but utterly impracticable.

107. *Periods of wage-payment (day, week or month).* (i) Per month to monthly paid employees, and per week to all others.

(ii) In the case of monthly servants from 2 to 10 days, and in the case of weekly payments one day.

(iii) (a) Unnecessary. (b) Unnecessary.

(iv) The total sum involved is infinitesimal.

108. (ii) In the mining camps, among coolies recruited by the companies' indebtedness is the general rule and is considerable. The cause appears to be the ingrained improvident character of the coolie aggravated by customary expenses at times of marriage, death and festivals. Among the causes most certainly is not the low level of wages. The contractor is forced by circumstances to advance money to coolies. On these advances no interest is charged, and most of these have finally to be written off as bad debts. Workers are also in the habit of borrowing from each other, and on these loans high rates of interest are paid.

109. (i) One month's wages by way of a bonus is given by most manganese companies to all monthly paid servants. Bonus is also paid on production (outputs) and on the quality of ore won. The effect has been satisfactory to all concerned.

110. (i) In addition to the usual holidays for festivals of about 20 days per year, workers also enjoy a holiday of about three weeks.

111. *Desirability of Fair Wages Clause in public contracts.*—On account of varying conditions in the different concerns, this is not possible.

**XIII.—Industrial Efficiency of Workers.**

112. *Comparative changes in efficiency of Indian workers in recent years.*—Employment has been stabilized on the larger manganese mines, and there has been an improvement in the efficiency of miners. No noticeable change in coal mines.

113. *Comparative efficiency of Indian and foreign workers.*—No data available.

**XV.—Industrial Disputes.**

123. Strikes and lock-outs are unknown.

**XVI.—Law of Master and Servant.**

127. The effect of the repeal of the Workman's Breach of Contract Act has been to loosen the hold of the employer over his recruited labour, and has created a tendency among labourers of taking advances from employers without any idea of fulfilling their own obligations. When the Workman's Breach of Contract Act was in force, on satisfying a Criminal Court of their bona fides, the employers could seek the help of criminal law to bring back absconding labour with advances. It is impossible to recover any money from absconding labour by means of civil law.

128. *Types of contract commonly in use.*—Annual agreement on one-anna stamp.

129. (i) Resort to civil law is ineffective.

(ii) Criminal law is not available.

**XVII.—Administration.**

133. *Central and provincial legislatures.*—The action and attitude appear to be the early enforcement of labour conditions in conformity with international conventions. It is the opinion of this Association that this tends to hurry the pace of progress, and that more real progress would be made if a more gradual advance was attempted having fuller regard to local susceptibilities and traditions.

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**I.—Recruitment.**

*Housing Condition and its Effect on Recruitment.*—This problem is not as acute in our province as in Bombay or Calcutta, because though the huts that the labourers occupy are comparatively small, still they have at least one hut to one individual family, and besides they have open space outside which is also used by them. The conditions in this respect are certainly far better than those in the overcrowded chawls of Bombay, where open space is almost an impossibility. As to the sanitary conditions, they are so used to them that they do not feel the necessity of any change, and there being sufficient sunlight and fresh air in the labourers, bastis, the ill-effects of lack of sanitary arrangement are not immediately felt. Here, also, conditions can favourably be contrasted with those in Bombay. In this way one of the chief causes why labour becomes migrative and non-permanent does not exist in the Central Provinces.

Secondly, the effect of such ample room for the houses of labourers is witnessed in the fact that the labourers live in these bastis with families and not singly. Had they to leave their families at their native villages, as for instance, the Bombay labourers are required to do, they would have run away to their villages very often. The following figures show clearly how labourers in the Central Province do live with families and not singly:—

Towns in Central Provinces				Males.	Females.
Nagpur ..	..	..	..	77,905	67,287
Barhanpur ..	..	..	..	18,885	17,050
Akola ..	..	..	..	20,718	17,145

From these figures it is plain that the number of males and females is nearly the same. Contrast with this the state of things in Bombay, where for every 1,000 males there are only 525 females. In Karachi there are 600 females to every 1,000 males. Similar is the proportion even at Ahmedabad. Fortunately no such disparity exists in our towns. The question regarding the moral effects on workers of such disparity does not arise at all.

As regards overcrowding in towns where the industries are chiefly located, the findings of the census report, 1921, run as follows :—" It would appear that the question is not one which arouses public interest. From the figures given, it appears that the number of houses exceeds the number of families ; indeed, from the sanitary point of view, it is probable that there is much more danger to the public health arising from imperfect facilities for drainage, breeding-grounds for mosquitoes found in stagnant water, impure water supply, than there is from too great pressure of humanity on space." We attach comparative figures below :—

Town.	No. of families per house.
Amraoti .. .. .	1.05
Buldana .. .. .	.92
Malkapur .. .. .	.93

The second column shows the maximum that is reached in the most densely populated parts of the towns. The average, therefore, is much lower.

*Figures for other Provinces.*

Town.	Number of persons living in each room.				Total.
	5 and less.	6-9.	10-19.	20 and above.	
Bombay	687,217	236,783	115,731	31,578	1,071,309

For one-room tenements.

Place.	Percentage in all tenements.	Percentage of persons out of total population.	Proportion of occupants.
Bombay .. .. .	70	66	4.03
Dongri .. .. .	92	91	4.17
Scori .. .. .	96	96	5.05
Ahmedabad .. .. .	55	52	3.39

There are 58 tenements each of a single room where 8 and more than 8 families stay per room. There are 658 tenements where 3 families live in each room. In Mandvi in 1911 the average number of persons per room was 15.07.

We heave a sigh of relief when we look to local conditions. In the first place, in the Central Provinces we do not talk at all of tenements but only of houses. Similarly, we do not collect figures of occupants per room, because obviously there has been no complaint of such overcrowding till now. Even the smallest labourer generally lives in a separate hut with his family.

From the above comparative survey it will be plain that so far as the number of houses and amount of open space are concerned, the Central Provinces has a decided advantage, and therefore labourers need not be supposed to have any disinclination for town life, as is the case in Bombay. Our mills, therefore, rarely complain of the migrative tendency amongst labourers.

The second cause of such a tendency is, as indicated above, insufficiency of wages. Though to all appearances the wages of labourers are considerably low, that does not deter them from making a permanent home in the city, probably because their earnings in the village are as low, if not lower still. We shall deal with the question of wages later, where we shall advocate an increased minimum wage. But for the present we can say that the standard of wages which prevails to-day does not affect the permanency of labour.

### III.—Housing.

We had had an occasion to refer to this question previously. About 40 per cent. (according to the Empress Mills) of the huts are owned by the labourers. Only a slight proportion live in houses supplied by the millowners. The need, however, of other Government, municipal or employers' help is not yet so keenly felt in our province. Secondly, as far as space and fresh air are concerned, we have very little cause to complain. But as regards the construction of these huts, ventilation, sanitation, etc., much improvement is needed. In the labour localities there is hardly any drainage system at all. The waste water is allowed to have its own course, and very often it flows across the roads or accumulates in small ponds, thus making worthy home for the breeding of the germs of every kind of disease. In addition, there is other filth all around the house. The roads are roads on sufferance only. The lights hardly do their function at all. The hut itself is hardly 8 ft. by 10 ft.

Furniture is out of question. The entrance is hardly 4 ft. in height, windows are rare, bathroom is not seen at all. Water taps are scanty. This in general is the kind of locality inhabited by the labourers. A welcome move has recently been taken up by the management of the Empress Mills, by which many of the disabilities referred to above will considerably be removed, and it will be a happy day when the other millowners will follow suit.

#### IV.—Health.

Death-rate among the labour localities in Nagpur :—

Name.	1925.	1926.
Ganeshpeth .. .. .	63·83	75·23
Mangalwari .. .. .	47·68	65·16
Khadan .. .. .	42·58	55·21
Beriapura .. .. .	71·49	75·57

From the above figures it is clear that the death-rate in the labour localities is incomparably high, being more than twice the average of the whole province.

The infant mortality amongst the labourers must necessarily be higher than the average. One thing is certain that the infants are not properly taken care of for want of substantial maternity benefit, and as a result the health of the infants in the womb suffer considerably. After the birth also the mother is overpressed with financial and other difficulties, and consequently the child rarely receives proper nourishment and care. Amidst such hardships it really is hard for it to continue to live, and hence the appalling infant mortality.

Coming to the health of the adult workers, both male and female, it is apparently far from satisfactory, and we think that one of the causes of general inefficiency is this general debility of the workers. A side issue of this inefficiency problem may be traced to the conditions in the infancy of a labourer's child. We have referred to this fact elsewhere, namely, that the mothers have to give small doses of opium to their infants when they are left at home. It is alleged that the want of mental capacity and lack of any kind of initiative on the part of an average labourer is due to this early opium poisoning. Since the adult workers are the grown-up infants of the labourers themselves, there is no reason to doubt the above allegation.

It is found by bitter experience that at the time of any epidemic it is the workers who have to pay the biggest toll. This plainly is due to the general debility of the workers on account of which even though they are somehow able to do their routine work there is no staying power in them and they cannot fight against such diseases.

With regard to labourers' latrines, bath rooms, etc., there are no arrangements whatsoever. The labourers from times immemorial have been doing without them. So much so, that in the model bastis of the Empress Mills at Indora (Nagpur) separate bathrooms that were built for them have in many cases been turned into store rooms. It is not so much the fault of the ignorant labourers. It is the duty of the intelligent public to teach them the common precepts of hygiene and sanitation.

**Medical Facilities.**—Out of 98 perennial factories only 13 maintain any dispensaries. The medical facilities therefore are extremely meagre. As regards private medical assistance in Nagpur the Sisters of Charity visit the labour localities from house to house and distribute common medicines. Some welfare centres also have been opened by the Red Cross. In the labour localities the need of either permanent or itinerant dispensaries is much felt. The employers, on an average, are indifferent to this. In all in the year 1926 the total number of labourers employed was about 25,550,000 yearly out of which medical aid by factory dispensaries was given to 186,634 yearly. It comes to not even one in 100 receiving medical aid of any kind. It will be seen therefore that much improvement is necessary in this respect.

In addition to these inadequate facilities we have received complaints that whenever medicines are given they are often adulterated. Persons suffering from serious illnesses have of course to take recourse to other doctors. It seems therefore, that stricter supervision is necessary over all these kinds of dispensaries.

The general tendency of the workers is in favour of Indian medicines. We cannot say whether this is due to lack of proper facilities or lack of confidence in European medicines. Women in general are shy of taking advantage of these facilities. They are far more conservative by temperament and therefore cannot take to a foreign system of medicine as easily as the men can.

In this connection we do advocate a properly organized Ayurvedic or Unani system of medicine. In the first place, the medicines are much more cheap than the costly foreign drugs and generally more effective too. The simple ingredients used in our medicines are more familiar to these workers. The present allopathic medicines being too dear are out of the reach of their thin purse.

### V.—Welfare.

Welfare centres have been opened by employers only in one instance in Nagpur in the cotton industry namely, the Empress mills. They have got a scheme the management of which has been given to the Y.M.C.A. and to the Sisters of Charity.

In some of the other labour localities welfare centres for women have been opened. Baby shows are held every year and competitive prizes distributed. Some factories make provision for creches.

The Y.M.C.A. maintain a dispensary of their own as well as some schools. The Sisters teach children and women the 3 R's, sewing and cooking, and also lectures are given on principles of health and hygiene. In addition to this the Sisters visit every home and give some common medicines. There is no separate scheme of instruction for the adult women besides what has been done by the Sisters. There are two night schools for half-timers and some children of the workers are taught in the mill schools. The management of the mills have started co-operative stores with its branches spread in different localities. Label tickets are issued to workers which are accepted in lieu of actual cash at the stores. This indeed is a very good scheme.

There are no adequate arrangements for dining sheds. The workers may be seen gathering in any convenient corner and helping themselves with their Chota Hazeri. Similarly, also there are no rest houses.

The work of the Empress mills with regard to the welfare scheme is indeed praiseworthy, but more still remains to be done. It was with this view that in the last session of the local legislature, a bill providing all such facilities was introduced. But the same has been postponed in view of the Whitley Commission's visit. We do hope that the Commission gives due attention to this subject and recommends to the Government to pass legislation making it obligatory on the millowners to provide such necessity to the workers as dining sheds, latrines, etc., and ready food at cost price. In our opinion these necessities ought to be provided by the millowners, because after all it is sweat of the labourers which is responsible for the pile which they make. In this connection what the trade unions can do is to organize welfare centres in other ways thereby providing the necessities enumerated above.

As regards sickness insurance and old age pensions, no employers have started any except the solitary Empress mills. It is often retorted by the millowners that the mill hands are not willing to co-operate in any such scheme by contributing a certain percentage towards the fund. The objection is no doubt true. But the reasons behind this lack of enthusiasm on the part of the labourers are worthy of notice. In a nutshell, they may be said to be in want of surplus money. The wages that they actually get are hardly sufficient to make both ends meet. Their inability to contribute is misunderstood as aversion. When the labourers put the best part of their life in the mill service, is it not obligatory on the part of the millowners to make provision for sickness and old age? So, unless the labourers are well paid, it is futile to expect any co-operation from them. In the absence of that we think that the burden of a permanent fund ought to be borne by the millowners.

### VI.—Education.

In Nagpur, the Municipality has decided to make primary education compulsory. The depressed classes missions have started 4 night schools where mill hands may get access if they so desire. The Empress mills give an annual contribution to the D.C. Mission. Besides this the Y.M.C.A. manage about 8 schools for the benefit of the workers. There is one peculiarity about these schools, namely their comparatively small attendance. The reasons behind this need not be enumerated in detail. The main cause perhaps is that these children fetch some money and as such the parents do not desire to send them to schools. Another reason perhaps may be that these children again relapse into illiteracy for want of continuous instruction.

*Factory Schools.*—There were 8 factory schools out of which 2 were closed down in 1927. The Nagpur schools attached to the Empress mills and managed by the Municipality give elementary education to half-time boy workers, but unfortunately the attendance is too low. Out of 300 boys on the roll only 80 attend regularly. In other factories in the Province the same tale is repeated. The small boys and half-time girl workers have recently been provided for, by separate classes in the Empress mills.

In the mining areas also the children of the operatives can secure education through schools attached to their establishments at Kaneri, Mehakali, and at Chhindwara such schools exist. In many places however, the miners' children have to depend on district council schools in the near vicinity if any.

On the whole it may be said that the parents of children are far from being keen on the education of their children. This may be because of the illiteracy and the constant economic stress on the family on account of which they think it better for

their wards to receive a few annas a day than instruction in the three R's. We would like to suggest therefore that more stress ought to be laid on adult education. As regards vocational and industrial schools, Nagpur, Amraoti, Chanda, Akola, and Jubbulpore have them. Carpentry, blacksmithy, weaving, shoemaking are the chief subjects taught. Besides these there are little facilities for higher technical and industrial education. But students from the civil and mechanical engineering schools are sent for higher education outside the province to such institutions as Victoria Jubilee Technical Institute, Bombay. There is, however, a conflict of opinion as to the real need of technically educated persons. The local government appointed a committee in the year 1920, and its terse finding is that the demand for higher technical training was not sufficient.

We strongly advocate a bold policy of compulsory education along with a definite scheme of adult education amongst the mill workers. Part of the expenses of such a scheme may rightly be borne by the employers.

### **X.—Special question relating to women and children.**

Where men and women are jointly employed as is the case in almost all cotton factories, some facilities to avoid the rush of men and women together should be given. It is the practice in the Empress mills to admit women to work half an hour later than men and to allow them to go home half an hour earlier. It is advisable that this practice should be compulsorily extended to all the mills. As regards the general hours of work per week of the women, there should be a kind of distinction between women having small children and those not having any. We are obliged to make this suggestion because sufficient arrangement has not been made and is not likely to be made in the near future for creches that would suffice. Secondly it must be remembered that women have to come from a long way off. Women who are not able to take advantage of creches have to leave their tiny babies at home from early morning to late in the evening. In the absence of any elderly person to look after them, they are given opium and then left in the hands of the bigger children. Even when women go home they have to attend to household duties and they hardly find time to look after their babies. The effect of all these circumstances, including bad housing, is to be seen in the appalling infant mortality amongst the labourers. If we compare figures in different Nagpur localities, we find that the mill going population suffers most in this respect, the ratio of infant mortality per 1,000 being :—Brahmins, 228·19; Kunbis, 392·79; Mahars, 365·58; Naharathas, 450·17.

The figures speak for themselves. The infants that survive in spite of their high mortality suffer in health for want of proper care and nourishment. The harm that is done to them in their childhood is indeed irreparable. It is a common fact that the death-rate in industrial towns is much more than in the open villages. Mill hands are generally village dwellers who migrate to the cities for livelihood, and if from amongst these so many infants die and if so many lose their vigour of childhood, the general loss to the manhood of the whole country is unimaginable. It should be the first duty of every statesman—official or non-official, capitalist or labourite, to try to devise means to put a complete stop to this appalling state of affairs. As the mother is the first person who can take proper care of the child, we have suggested above that she should be given more time to attend to her child. In view of the facts stated above, we propose that the working hours of women be reduced to eight hours per day so that they may have some breathing time. In addition to the creches, some centres ought to be established in the labour localities supervised by one or more trained nurses. These ought to accommodate babies as well as toddlers, so that the mothers will be spared the trouble of carrying their babies a long way to the mills, and will be able to attend to their respective duties with freer mind.

*Maternity Benefit.*—The necessity of a scheme of maternity benefit cannot be overrated. If at any time in a woman's life utmost care is to be taken of her mental and physical health, it is at the time of child birth, a few weeks before and after, because on that depends the well-being of the infants and therefore of future manhood. But unfortunately we have been neglecting this aspect of the question. It is exactly at this period of a female mill labourer's life, that she is obsessed on all sides by various difficulties. She is obviously unable to put in her usual quota of work. The mill owner cannot continue to pay her full wages without receiving a due return from her. As long as she possibly can, she works hard and overstrains herself nearly always. But a time comes when she had to be discharged from her work and then her condition is more pitiable still. With the meagre wages that she earns throughout the year her financial position is far from such as would enable her to continue without work and she finds it nothing short of a herculean task to make both ends meet. In the ordinary time she works all the week long, now she is forced to remain at home and starvation stares her in the face. But she cannot help it and remember

she has a second life within her to look after. She can afford to starve even herself, but not the little offspring to be. What is she to do? Worry and worry alone. Thus her physical health is sure to be undermined for want of even ordinary food, then what to talk of proper nourishment and rest which is so essential at this period? Secondly she has untold mental anxiety which saps her energy to the very core. Thus when she is little better than a physical and mental wreck, she gives birth to a child. The circumstances after the childbirth are if possible still worse. Scarcely a month passes before she has to resume her work in the mills. The consequences of such early resumption of hard work upon her general health need not be described. Gradually in this way at each succeeding delivery her vitality together with that of the babies is being destroyed. In view of the above facts there is a general demand that some sort of maternity benefit should be made compulsory. It may fall into two categories. They are (1) those which restrict the employment of pregnant women by prescribing proper rest periods at intervals and (2) those which grant benefits and medical services. Both these are mainly intended to safeguard the health of working mothers by assuring them adequate rest and freedom from pecuniary anxieties during the periods in question and their aim is to reduce infant mortality, by provisions to secure the health of the child when the mother returns to her work. We need not go further into details as a Maternity Benefit Bill has already been introduced in the local legislature. As to the attempts of certain humanitarian mill owners in this province to give such benefits on their own private account, it is to be noticed, that only 5 out of 98 perennial factories give them. Consequently, it may be presumed that in the remaining factories women are discharged on account of advanced pregnancy, and secondly no adequate safeguard exists which guarantees work to them when they want to rejoin. We had questions in the local legislature as to whether women are really discharged because of pregnancy. Government had no hesitation in answering in the affirmative. This leaves no doubt as to the deplorable state of things. We earnestly hope therefore that the Maternity Benefit Bill which is in the running will have an easy sail.

*Re children and young adults.*—The minimum age of a child should be 12, as it is. But there are many practical difficulties in the way. For instance the child being an immediate source of income, parents cannot resist the temptation of hiding the age of their respective children. In the grant of medical certificates to these children the conditions may not be as satisfactory as desired. The main difficulty is due to the fact that the compulsory registration of birth does not yet obtain in many parts of the province. We therefore suggest that registration of births should be made compulsory in order to facilitate the present law regarding children. The maximum age of the child should be 15, after which he may be classed as a young adult.

*Young Adults.*—It should be laid down by law that these should be treated as regular apprentices. They should be so trained as to increase their efficiency in handling the machinery. Of course the aim ought not to be to make them mukadams only. They will be required to do the ordinary work but far more efficiently. This seems to us the only solution of the problem of inefficiency. It is between the ages of 15 and 17 that the mental and physical development of the workers take place. They must not suffer permanently from the effects of overwork. For this reason, we propose that there should be some restrictions on their hours of work. In no case should they be given more coolie work. The aim of legislation with regard to these young adults should be to train them for skilled labour. The owners and managers of mills may object to such reforms, but we can do nothing more than to assure them, but they would be more than compensated by the increased efficiency of these young persons. If at all, the actual work suffers somewhat in this period of training, at the most some restrictions may be enforced as regards to the future employment of these trained workers.

## XII.—Wages.

The best indication of the insufficiency of wages can be obtained if one visits the different labour localities in the province. Their dwellings are low, their clothes are tattered, their food is coarsest. They cannot even get the necessities of life much less, therefore, other conveniences and comforts. In other words, their low wages are reflected in the lowest standard of their living. If we look at the figures of the average wages of an unskilled labourer during the past few years we see that the wages have definitely decreased, while to all appearances the cost of living has gone up.

Monthly Wages.						Males.	Females.
Year.							
1925	..	..	..	..	..	17	10
1926	..	..	..	..	..	16	10
1927	..	..	..	..	..	15	9
1928	..	..	..	..	..	15	9

These figures are taken from Government Report on Factories.

Let us go into details in connection with the family budget according to the Government enquiries. The average family consists of 1·47 men, 1·47 women, ·78 male children and ·61 female children in all making 4·33. Here is a rough estimate of a family of four members, 1 male, 1 female and 2 children.

	Rs.
Rice .. .. .	6 per month.
Wheat.. .. .	6 "
Dal and vegetable .. .. .	5 "
Fuel .. .. .	2 "
Spices, including vegetable oil .. .. .	4 "
Lighting .. .. .	1 "
House rent .. .. .	1 "
Total .. .. .	25 "

The conclusion that we arrive at is that if the man and woman both work for 30 days in a month without absenting themselves, they can barely manage to exist, but must go without :—(1) Clothes ; (2) pan, bidi, tea, etc. ; (3) without religious ceremonies ; (4) other social functions ; (5) amusements ; (6) education ; (7) medicine ; (8) maternity ; (9) saving for odd times.

But as many of the details above are essential to life (even for an unskilled labourer) we have no hesitation in saying that they are underpaid, and therefore underfed. The Nagpur labourers generally cannot afford to use milk, the percentage expenditure being only ·93 per cent. of his average earnings. When it is considered that the skilled and better paid workers must on the whole be using the greater per cent. of this, it goes without saying that the average mill hand rarely sees milk for days together. Of course, the Indian labourer in general stands no comparison with his fellow worker in other countries in the matter of consuming nourishing food. Here are certain figures which tell their tale :—

	In America.	In Nagpur.
	lb.	lbs.
Fruits .. .. .	200	0
Milk .. .. .	500	6
Vegetables .. .. .	420	18
Sugar .. .. .	63	4

The diet of the Indian worker is thus seen to be far less in quantity than that of the world labourer in general and the quality of the food he eats is the lowest that can be imagined. The Central Provinces Government made certain enquiries during the year 1926–27 into the cost of living of industrial labourers at two places, in Nagpur and Jubbulpore. The conclusion they arrived at is that from between 64 to 75 per cent. of the labourer's income is spent on food articles. Consequently the underpaid labourers (lower unskilled) have to supplement their earnings by debt and begging. No statistics of the debt have yet been prepared, but it is obvious that the very existence of the labourers depends upon debts. When we visited certain labour localities in Nagpur we came across not a single instance amongst them where there was not a huge burden of debt. In addition to this, some deduction has to be made from their already meagre income because of certain percentages that the jobber necessarily claims from them. In our enquiries, we were sorry to find that almost every labourer has to give a definite sum to the jobber, not only at the time of securing service, but even month by month. If they hesitate in paying this, they are discharged under some pretext or other. Of course it is very difficult to prove this state of affairs, because the labourers are naturally extremely afraid to disclose this. We are sorry we have to include this general indictment against jobbers in this our memorandum, but it is done with the honest desire of improving the lot of poor labourers. As a side issue of the present enquiry, we may suggest the following remedy, to put a stop to the practice. In the first place recruitment of labourers should not be in the hands of the jobbers. Secondly the supervision work that they are given should constantly be changed, so that no batch of workers remain under the same jobber for any considerable length of time. The details of this can be worked out in conjunction with millowners.

Begging is not as rare as one thinks it to be on the surface of it. Leaving the millhands out of consideration, we may cite the instance of scavengers, of whom quite a lot do this begging business. Before concluding our observations with regard to the underpayment of labourers, we should like to emphasise two important consequences, namely, general inefficiency of the labouring class, possessing no energy, vigour or initiative of any kind, their mental faculty being completely buried beneath the constant worry and anxiety of how to make both ends meet. Secondly, their gradual physical deterioration. The Municipal Health Report of Nagpur of 1928 gives about 40 per cent. of deaths as due to general debility, which means



nothing less than that at least so much per cent. of population is underfed, and consequently lacks in bodily vigour, and any resisting power to disease. It is indeed very difficult to say which is the cause and which is the effect, inefficiency of work, or inefficiency of wages. Before leaving aside all discussion, the fact remains that the average industrial labourer is at present decidedly underpaid.

#### *General Suggestion.*

One particular, that we want to emphasise, is the absolute prohibition of night work for women, since it is injurious to their health, dangerous to their morality and leads to a neglect of family duty, and duties towards children. An exception to the above prohibition in favour of ginning factories is often claimed. If after deep deliberation such exception is granted, proper safeguards for the women's health and morality must first be guaranteed.

It seems that there is no adequate inspection arrangement. District and Government inspectors no doubt visit the factories and submit their report but to our mind Government ought to appoint non-official visitors, both male and female, on the lines of the jail visitors, in all factories, because it is there that the health of the workers, especially of women and children, is likely to be affected most.

#### *General.*

Before we conclude, we would make a few suggestions of a general character. In other places we have advocated extended educational facilities to the workers employed in the mills, factories and mines. But we would like that they should not be confined to initiation into the three R's. The chief aim should be to enable the worker not only to take an intelligent interest in the work before him, but to get adequate knowledge of his rights, privileges and responsibilities. In short the object of the education should be to make him a useful self-respecting unit of society. Then it is futile to expect increased efficiency in a worker, unless his standard of living is raised. Higher standard of living will furnish him with an additional incentive to put forth his best effort. If the efficiency of the worker is to be maintained at a fairly high level, greater attention than hitherto ought to be paid to the improvement of his health. For this purpose provision ought to be made for sports and games. There should be also a system of compulsory medical examination of all workers at frequent and regular intervals. It should be possible to eliminate the wholly unfit or misfits. Co-operation should be encouraged among the workers and the advantage of co-operative system should be brought home to them, by practical teaching and demonstration.

### THE FACTORY OWNERS' ASSOCIATION, CENTRAL PROVINCES AND BERAR, KHAMGAON (BERAR).

#### **I.—Recruitment.**

1. (i) Forty per cent. of labour is imported and 60 per cent. drawn from local sources. The labour is generally not of a migratory nature, but seasonal to the extent of 40 per cent.

(ii) Causes of migration are surplus labour, more pay or wages

(iii) *Changes in recent years* :—Local men have learnt work requiring skill ; importation of skilled labour is therefore reduced recently. Besides, more than sufficient labour is available owing to general unemployment due to trade and industrial depression.

2. (i) Percentage of labour coming from villages is 25 ; average duration of their service is four months in a year. This class of labour returns to the respective villages once and soon after the season is over and they find agricultural work there.

(ii) Permanent force consists of fully paid servants to the extent of five to seven per cent.

3. (i) Skilled labour is partly recruited from amongst those at the door and partly by sending for them from different provinces and places. The unskilled labour generally comes to the industrial centres to reside in the beginning of the season. In case this and the local labour fall short of the demand, head-men are sent in villages in the neighbourhood for recruitment.

(ii) No improvements can be suggested.

- (iii) *Public employment agencies.*—(a) *Desirability of establishing.*—Not desirable.  
 (b) *Possibility of practical schemes.*—Not needed.

6. *Recruitment for Assam.*—This must be checked as there is already a shortage of labour in this province.

7. *Unemployment*—(i) *Extent of character.*—In the season, labour finds enough work, in fact, the demand for labour is greater than the supply; the labourers return to their abode soon after the season is over and take up to agricultural or other work incidental to or connected with it.

(ii) *Extent to which caused by*—(a) *Retrenchment or dismissals.*—Necessity for these does not arise in the season.

(b) *Voluntary retirement.* (c) *Other causes.*—Do not arise for the same reason.

(iii) *Possible methods of alleviating and remedying distress.*—The recent introduction of terminal taxation by the local bodies has increased the cost of production; in order to alleviate and remedy the distress, the railway freights as well as the indiscriminate taxation by local bodies ought to be reduced.

(iv) *Unemployment insurance.*—Both unnecessary and undesirable.

(v) *Application of International Conventions relating to unemployment.*—Absolutely unnecessary.

8. (i) *Average duration of employment.*—In any one year it is about four months. The remaining period of eight months is occupied by the labour force in returning to their villages for other work. Generally these people return back after the completion of the field work.

(iii) *Absenteeism.*—(a) Approximately 10 per cent. in the weekly paid staff alone and this is due to the employment in some other more paying work and two per cent. in the monthly paid one for the same reason. There is, as a rule, no absenteeism for reasons other than those stated above in the seasonal factories since the labourers are generally fully aware that the season is the only period when they must earn as much money as possible as will enable them to maintain themselves in the event of their failure to get any employment in the slack seasons.

## II.—Staff Organization.

12. (ii) *Facilities for training and promotion of workmen.*—Intelligent men and labourers generally take training under the experienced and skilled men and workers, and if they are found competent, they are promoted both in pay and in position.

15. (i) *Extent and character of work given on contract.*—(a) The pressing of bales, filling in of bojas are works invariably given by contracts. (b) Stocking of kapas and ginning the same is done in some places by contracts. The approximate percentage of contracts is 95 per cent. and 10 per cent. respectively for (a) and (b).

(ii) *Extent of sub-contracting.*—Approximately 2 per cent.

(iii) *Control exercised over working conditions.*—Specific provisions are put in the contracts rendering it obligatory on the part of the contractor or sub-contractor to employ labour and to make them work in accordance with the provisions of the Act.

(iv) *Effects.*—The work is facilitated and it is also found satisfactory.

## III.—Housing.

16. *Extent to which housing is provided.*—(i) *By employers.*—About two per cent.

(iii) *By private landlords.*—About 28 per cent.

(iv) *By workers themselves.*—About 70 per cent.

17. *Facilities for acquisition of land for workers' houses.*—Separate plots are allotted in files by private landlords and by the municipal committees on a fixed rent and the labourers erect their huts thereon.

18. *Nature of accommodation provided in each class.*—(i) *In relation to workers' demands.*—No demand. The owners provide accommodation of their own accord to facilitate their work.

(ii) *In relation to best type from health point of view.*—It is healthy in the houses provided by the employer and in the huts or houses of their own; but the same is not the case in respect of labourers in the dingy quarters of the town.

(iii) *Provision made for lighting, conservancy and water supply.*—Satisfactory in the case of 18 (i) and inadequate in case 18 (ii) above.

19. *Utilization by workers of accommodation available.*—To the full extent.

20. *Rent rates in various classes.*—In the case of (16) (i) above, no rents are charged; in the case of (16) (iii) rent rates vary from 8 annas to Rs. 5 per month according to the class of accommodation selected by the workers.

#### IV.—Health.

23. No separate figures of birth-rate, mortality and infant mortality of workers are available; however, the following are approximate figures based on the past experience.

(i) *Figures of mortality.*—Twenty per 1,000 of the total labour.

(ii) *Birth rate and infant mortality.*—Birth rate is 5 per cent. and infant mortality 2 per cent.

*Methods of registration.*—Municipal committees register births and deaths in their areas; in villages and small towns, registration is done by the village officials and sanitation panchayat committees, respectively.

(iv) *Dietary.*—Usual diet is Jawar, pulses, vegetables and oils; monthly cost varies from Rs. 6 to Rs. 15.

(v) *Physique.*—Good and well built.

24. Women doctors are not available, and therefore hardly employed in small industrial towns. Trained midwives and dais are generally employed in the public dispensaries to which factories contribute their quota of contribution and the labourers both male and female, are asked to take their full advantage. Certain appliances and Ayurvedic medicines and English ones are however kept in well managed factories. Recent activities of the Red Cross Society are appreciated; they should therefore be encouraged specially on Ayurvedic lines.

25. *Extent to which medical facilities are utilized.*—(i) *Generally.*—50 per cent. approximately; the rest prefer their own old ways, which are to a very slight extent connected with the Ayurvedic system.

(ii) *By women.* 25 per cent. approximately; women do not like to take as much advantage as is provided for them; but the employment of trained dais seem to work better.

28. (i) *Control of temperature in factories.*—There is absolutely no necessity of any control of temperature in cotton ginning and pressing and other seasonal and small factories, which are themselves airy and well-ventilated.

If any control is exercised these industries which are in bud now will cripple down. A Bill to regulate temperature was introduced in 1926 in the Legislative Assembly, but it was not passed. A copy of representation on that Bill is herewith enclosed. (Annexure I.)\*

(ii) *Control of humidification in cotton mills.*—Reports so far received are satisfactory.

30. *Sickness insurance.*—*Suitability of International Labour Convention.*—Not at all suitable and necessary.

(ii) *Possibility of introducing other systems.*—No other systems are possible at this stage of general depression in trade and in industry.

(iii) *How to meet difficulties arising from non-acceptability of Western medicine, paucity of medical men, migration of labour, finance.*—Ayurvedic and Unani systems should be introduced in place of Western medicines, men trained in them and the systems financed by the Government to the extent of 60 per cent., and by local bodies and employers to the extent of 20 per cent. each.

31. *Maternity benefits.*—No schemes exist in seasonal factories, and any legislation introduced to cover these factories will fail to have its desired effect.

(ii) A Bill in this respect introduced in the Central Legislature in 1925 met with failure. In the C.P. Legislative Council it is referred to the select committee. (A copy of the representation on the C.P. Bill is herewith enclosed.) (Annexure II.)\*

(iii) No possibility of any legislation of the types referred to above, for reasons stated in the representation. Report of Select Committee is awaited with interest.

**V.—Welfare (other than Health and Housing, but including Education).****32. *Extent of welfare work.***

(i) *By employers.*—No necessity arises in the factories which are seasonal, *i.e.*, working intermittently on an average for four months. In perennial factories some sort of welfare work is done.

(ii) *By other agencies.*—Municipal committees and Red Cross Society; baby shows are annually held to educate mothers.

33. In all big industrial centres, a branch of the Red Cross Society is maintained wherein Health Visitors have been appointed to look after the welfare of the public in general, and of the labour class in particular.

34. (i) *Provision for refreshments, shelters and creches.*—Temporary sheds are erected for a certain class of workers in big and well-managed factories. No creche is maintained as infants are not allowed in the ginning factory under section (19-A) of the Indian Factories Act 1911, as modified.

35. *Results achieved.*—Death rate of infants is reduced by the activities of the Red Cross Society; workers in general are encouraged to build up a strong constitution owing to wrestling matches, and communal feelings are soothed.

37. *Desirability and possibility of provision for old age and premature retirement.*—Not at all desirable and positively impossible in the case of factories working for a season only.

**VII.—Safety.**

43. *Existing regulations in factories, mines, railways and docks.*—Factories.—Quite adequate.

45. Majority of accidents are due to the negligence on the part of workers.

46. *Accident prevention.*—Attempts are always made to act up to the provisions of Factories Act, and the rules thereunder in this respect and in other directions possible, such as instructions to the workers of the dangers of machinery, constant supervision and incorporation of the necessary clauses in the contracts, if any, in this respect.

48. *First aid and medical relief.*—Certain appliances are kept in big and well-managed factories, and medical aid is sought for from the municipal dispensaries or from private ones at the cost of the employer generally.

49. *Stringency of inspection and enforcement of regulations.*—The inspecting staff enforces one regulation at one time and the other at another time; thus greater stringency is observed in recent years, thereby causing unnecessary and frequent troubles and expenses to the management without doing any good in reality to the employees.

**VIII.—Workmen's Compensation.****51. *Workmen's Compensation Act***

(i) *Extent of use.*—It is fully utilized.

(ii) *Comparison with extent of possible claims.*—To the full extent as far as it is known.

(iii) *Effect on industry.*—Workers are generally not fully aware of the facilities of the Act, but they think that accident will pay them and therefore they make much of the accidents, with the result that the employers have to pay more in many cases due to the disinclination of the workers to rejoin their work early, thus entailing an additional charge on the industry.

(iv) *Availability and use of insurance facilities and value from workers' point of view.*—Formation of Mutual Insurance Companies as the one in Bombay, *viz.*, the Millowners' Mutual Insurance Association, Ltd., should be encouraged by the State as the use of insurance facilities is reduced by present high premium charge; from the workers' point of view they will receive payments more regularly and immediately to which they are entitled.

(v) *Desirability of compulsory insurance by employers.*—Compulsory insurance by employers is not at all desirable at this stage, as the same would impose too heavy a burden on the already depressed industries ; since all claims have been met with heretofore, the necessity for compulsory insurance does not arise.

53. *Suitability of provisions.*—The present provisions in the Act are quite adequate, and they are working satisfactorily. They therefore need no amendment.

## IX.—Hours.

### A.—Factories.

55. *Hours worked per week and per day.* (i) *Normal, i.e., as determined by custom or agreement.*—10 hours a day and 60 hours a week.

(ii) *Actual, i.e., including overtime.*—12 hours a day and 72 hours a week in cases of certain exempted workers ; as regards non-exempted ones, they are as described in (i) above.

(iii) *Spreadover, i.e., relation between hours worked and hours during which worker is on call.*—The same as described in (ii) above.

56. *Days worked per week.*—Six days in the case of non-exempted workers and six and a half in the case of exempted ones.

57. *Effect of 60 hours' restriction.*

(i) *On workers.*—Generally satisfactory.

(ii) *On industry.*—Restriction entails hardship on industry and increases the labour cost, and in consequence the cost of production, owing chiefly to the disinclination of the labourers to work honestly throughout the working hours.

59. For reasons stated in 57 and 58 above, the reduction in the present maxima is entirely undesirable. Besides, the present hours of daily and weekly work afford labourers sufficient time for rest, recreation and amusement every day and every week. If the reduction is enforced it will undoubtedly tell adversely on the several industries as the cost of production would increase to an undesirable and prohibitive extent. The Indian worker has a natural tendency to steal out a portion of his legitimate hours of work by whiling away his time elsewhere ; in order to keep the machinery fully attended the employers have to keep extra staff to replace these workers who are prone to leave work under one excuse or another. Reduction in the maxima is therefore deprecated.

60. *Intervals.* (i) (a) One hour's interval in the mid-day ; it exceeds in case the factories work by shift system.

(b) The workers have, as a rule, no fixed timings for taking their meals as is the case in European countries, but different people have got their different timings, and as such the employer has unnecessarily to engage substitutes to suit their habits.

(ii) Under the present law, the employer has to give the workers compulsory periods of rest, and in addition to this he has also to give them further rest for his irregular habits ; during these additional intervals the employer has to engage substitutes, and as such reduction of one hour's rest to half an hour, as provided for in section 21 (1) of the old Act of 1911, will be most suitable.

(iii) *Suitability of hours during which factory is working.*—If the suggestion in No. (ii) above is carried, the present practice may be found suitable. There is absolutely no necessity of any other provision in the present law.

(iv) *Number of holidays given.*—Over 20 in the seasonal and 55 in the perennial factories.

61. (i) As a matter of fact, days of rest fall generally on the weekly bazaar days which are, in many places, days other than Sundays ; but very recently, the factory department of this province is taking objection to such holidays being granted in case they fall on days other than Sundays and thus disallows substitution of such weekly holidays (other than Sundays and as notified to the department) thereby causing a good deal of trouble and inconvenience not only to the employer, but to the workers as well, as they would not be able to purchase rations at rather cheaper rates on the bazaar days in the event of the grant of Sundays as regular weekly holidays whereby the management will be able to substitute Sundays for any other days of the week for its business purposes.

(ii) The law should therefore be suitably amended to provide for substitution of a substituted holiday (*i.e.*, the day other than Sunday) as termed by the department for the above purpose.

Further, the law does not permit the substitution of a weekly holiday under clause (b) of sub-section (1), section 22 of the Factories Act, if the manager has not given notice of the same previous to Sunday or the substituted holiday, whichever is earlier. The amendment should, therefore, be of such a nature as to permit the manager to substitute the weekly holiday when the occasion demands, and mere earlier notice should not debar him from substitution which is essential for business purposes.

An instance below will make the point clear: A factory, not working on any of the three days previous to Sunday, at the same time having no knowledge or possibility of its working on Sunday, receives on Saturday, Friday and Thursday sufficient stock for consumption on Sunday. The constituents in the factory also press for working the factory to finish up work on Sunday to facilitate their further transaction. In such cases, which are not uncommon in seasonal factories, and much more so in the cotton ginning and pressing factories, the management cannot work the factory on Sunday as notice was not given, or, rather notice could not be given for want of knowledge of the possibility of working on Sunday, to the inspector to that effect previous to the substituted day, which has in this case fallen earlier. With a view to avoid such occurrences, an amendment of the clause is prayed for.

Such an amendment when accepted will not only not come in the way of workers enjoying a weekly holiday, but it will facilitate business.

Besides, workers are not allowed by Government to work only for cleaning and for such other purposes on prescribed holidays in such factories where machinery is silent, and where these workers actually work less than 60 hours in a week.

The amendment of the law is prayed for so as to enable the employers to take work from labourers not later than noon in case their weekly total hours of work are below 56 hours. Such a provision is badly needed in seasonal factories which do not invariably work continuously for a week round.

62. Provisions in respect of exemption are quite adequate in the Act as amended by the Act II of 1922, and subsequently by the Act XXVI of 1926; but the Government have been too strict to grant even the necessary exemptions. The following instances will show that certain exemptions granted in certain provinces are not allowed in this province with the result that the factory management has always found it most inconvenient and troublesome, and in some cases impossible to observe the provisions of the law.

The work of persons employed in the engine room and in the boiler house is exempted in *Burma* from the provisions of Section 21, 22, 26, 27 and 28 of the Act, as this work is considered by that Government to be of preparatory or complementary nature, which must necessarily be carried on outside the limits laid down for the general working of the factories, and the work is intermittent and continuous production is necessary.

The work of boiler attendants, engine drivers and persons employed in despatching and receiving goods in all factories is also exempted in *Bengal* from the same provisions as those in *Burma*, viz., from the provisions of Sections 21, 22, 26, 27 and 28 of the Act.

In *Bombay*, exemption is granted to certain factories from the provisions of Section 35 under first proviso thereof (which was added in 1926) in respect of persons other than children employed therein for definite periods laid down in the notice in accordance with Section 36 of the said Act.

In *Bengal*, the ginning factories were exempted from the provisions of Section 22 of the Act till the end of 1925.

A recommendation by your Commission to the effect that exemptions should be granted on a more liberal scale will oblige the industries in general.

## XII.—Wages.

### 96. (i) *In industry.*

	Men.	Women.
Skilled .. ..	Rs. 2 to 3	Nil. per day.
Unskilled .. ..	As. 10 to 14.	As. 6 to 8
Unskilled .. ..	Less 1 anna.	½ anna less
(Contract) .. ..	(of the ordinary unskilled labour).	

(ii) *In surrounding agricultural areas.*—On an average 25 per cent. less than those in the industry.

(iii) *Difference between money wages and money value of all earnings.*—No data available.

104. *Effect of wage changes on labour supply.*—With the increase in the wages, the supply increase.

105. *Minimum wages.*—In the circumstances when industries in India have not become fully self-supporting, and they have to meet keen competition as well as cut-throat one, it would neither be advisable nor possible to have any statutory establishment of minimum wages ; labour is also not yet trained to the level of having even primary education, and is moreover unorganized and illiterate.

106. *Deductions.*

(i) *Extent of fining.*—Nil.

(ii) *Other deductions.*—Nil.

(iii) *Utilization of fines.*—This does not arise.

(iv) *Desirability of legislation.*—Absolutely undesirable.

107. (i) *Periods for which wages paid.*—Days, weeks and months.

(ii) *Periods elapsing before payment.*—Daily wages are rarely paid on the days for which they relate, but they are generally paid on the bazaar days. Weekly wages are paid on weekly bazaar days. Monthly wages are generally paid after 6 days, but before 12 days of the succeeding month.

(iii) In view of the easy and regular system, no legislation is desirable.

(iv) If the wages, which amount to a negligible sum, are not claimed within a reasonable time, they automatically lapse to the management.

109. (i) After bumper seasons, the monthly paid staff is either kept in service in the slack season or some rewards or bonuses are given to the extent of one month's wage. Profit sharing schemes in the present circumstances between labour and industry are neither possible nor desirable.

110. (i) and (ii) The question of annual leave does not arise in the case of seasonal factories. 10 to 15 days' leave with full-pay is given to the monthly labour, whenever he is in need of it ; sick leave with full-pay, half-pay or even without pay is granted as the occasion demands. Leave without permission is invariably treated as without-pay-leave and undue frequency in this regard results in dismissal.

(iii) *Extent of consequential loss to worker of backlying wages.*—No data available.

111. *Desirability of fair wage clause in public contracts.*—On account of varying condition, in different concerns, this is not possible.

#### XIV.—Trade Combinations.

117. (i) *Employers.*—The Factory Owners' Association, Central Provinces and Berar with its office at Khamgaon in Berar is an employers' organization established in 1922 ; total number of factories enrolled in this association to this date is 225, and includes 140 ginning, 75 pressing, 2 textile and 1 cement factories and 140 oil mills from the district places and districts of Amraoti, Akola, Buldana, Chanda, Chhindwara, Jabulpore, Nagpur, Nimar, Wardha and Yeotmal. The association therefore practically represents cotton industry and oil industry in general.

There are also the Central Provinces and Berar Mining Association, Kamptee, the Central Provinces and Berar Coal Mining Association, Chhindwara, and the Katni Lime Manufacturers' Association, Katni.

In almost every cotton centre in the Central Provinces and Berar pools of ginning and pressing factories exist.

(ii) *Employed.*—The Mechanical Engineers' Association, C.P. Berar and Bombay Presidency, in Akola and some trade unions of labourers in Nagpur. Of others : Not aware.

118. *Effect of organization on industry and conditions of work generally.*—Favourable to both and relations so far are cordial.

#### XVI.—Law of Master and Servant.

127. *Effect of repeal of Workmen's Breach of Contract Act.*—Adverse from the employers' point of view as the control is lost.

128. *Types of contract commonly in use.*—Ordinary, on general stamps or one anna stamp.

129. *Extent to which law is available and used for enforcement.*

(i) *Civil.*—To a very little extent, but this law is ineffectual.

(ii) *Criminal.* Not available.

**XVII.—Administration.**

134. *International labour organizations.*—Such conventions as suit the Indian conditions have so far been ratified. They are, as a general rule, far in advance of the conditions prevailing in India, and as such they should only be ratified in time to come as the conditions considerably improve.

(ii) From the industrial point of view, their effect is burdensome. So far as labour is concerned, it is satisfactory.

139. *Factory legislation.*

(i) *Adequacy of staff.*—Adequate.

(ii) *Uniformity of administration in different provinces.*—Not uniform. Other provinces are more lenient to the industries in their respective provinces as is described in No. 62 above. This will also be clear after perusal of factory reports of different provinces.

(iii) *Rigour and efficiency of administration.*—Rigorous and inefficient chiefly because one regulation is enforced at one time, and the other at another time as discussed in Nos. 49, 61 and 62 above.

Inspection by additional inspectors is most troublesome only because they have no real knowledge of the working conditions. Further, they hardly rely on employers; such inspections, therefore, need discouragement.

(iv) *Prosecutions and their result.*—Prosecutions are to a great extent sanctioned without any say thereon by the management, and much more so in the case of additional inspectors who hardly record their note in the inspection book kept in the factories; this results in the industry being unnecessarily burdened with the proportionately heavy fines. Inspecting staff is believed more than the management as the prosecution proceeds and the onus of proof lies solely on the managements. This state of affairs needs change.

A note on the stringency of the present Act in respect of certain provisions is herewith enclosed. (Annexure IV).

*Annexure IV (referred to in question No. 139 (iv)).*

*Note on the stringency of the present Act in respect of certain provisions.*

With the amendment of Sections 3, 26, 35 and 36 of the Indian Factories Act, 1911, in 1922, a radical change has occurred. Small industries employing even less than 15 persons have been brought under all the provisions of the Act; provisions of Chapters IV and V and Sections 35 and 36 of the principal Act have been withdrawn with the result that at present Chapter IV and Sections 35 and 36 of the Act are applied to "all persons who are solely employed in any place within the precincts of a factory, not being a cotton reeling room or winding room in which place no steam, water or other mechanical power or electrical power is used in aid of the manufacturing process carried on in such factory, or in which such power is used solely for the purpose of moving or working any appliances in connection with the bringing or taking of any goods into or out of the factory." Hours of work of men are to be prefixed, and register of all men and women, in addition to children, is to be kept up to date in the prescribed manner and in the prescribed form.

All these amendments have imposed a considerable hardship on the small industries in particular.

It will be a blessing on the small industries employing less than 50 persons, in case they are exempted from the provisions of Section 35 and of Section 36 in respect of the despatch of notices to Government by insertion of a clause in the Act.

As a result of the administrative difficulties in connection with Sections 26 and 35 of the Act, as amended by the Act of 1922, provisions have been made in 1926, and the local governments have now been given power to grant exemption from the provisions thereof under certain conditions. These provisions have been freely used by the Government of Bombay, Bengal and Burma (as described in No. 62 of the List of Subjects of the Commission). The C.P. Government is, however, quite opposed to granting the very necessary exemptions.

Even if these exemptions are granted, amendments of the original Sections 3 (2) and 36 of the Act will also be equally troublesome to the factory management. Re-insertion of Section 3 (2) in the principal Act or some such provision is urged upon in the Act as will exempt all persons working in the premises of the factory from the provisions of Chapter IV and of Sections 35 and 36. Such an amendment will undoubtedly reduce to a considerable extent the burden put on by the present law.



## THE PUBLIC WORKS DEPARTMENT LABOURERS.

The word labourers is used here for coolies (males and females), masons, timekeepers and mistries. There are thousands and thousands of coolies employed in this department and the mates and timekeepers are appointed to look after their work, and the mistries are appointed to look after the work of the masons. There is a very large number of coolies, mates, masons, timekeepers and mistries of 20 or 30 years' regular service in the department but they do not get any kind of bonus or pension. They have to work for nine hours a day and sometimes more than that at the time of urgent work, but they do not get overtime charges of work and no holiday is given to them. There is no sick leave. If any one fall sick, his wages are cut off and there is no certainty of work. They can be stopped from the service at any time by the officers, even if they are of 20 or 30 years' regular service.

*Daily Wages.*—There are two sections of coolies. Those below 12 years of age and those above or about 12 years. Those above 12 years get higher rates than those below. Males get 7 annas and females 4 annas a day. Those below 12 years get less than 6 annas in proportion to their age. There are no facilities for the female workers. Nothing is paid by the department at the time of their delivery, but they are marked absent and they receive no wages till they attend their work. The masons get from 10 annas to Re. 1 8 annas per day; but the masonry work is very dangerous. At the time of constructing big buildings and bridges, death occurs and coolies and masons get injured while working, but nothing is paid to them and they are marked absent till they attend work again. If death occurs their family members do not get anything. If there is a right type of officer he pays one or two months' pay, and in this way the coolies and masons are always in debt.

The rates of daily wages of mates are not fixed. Some get 9 annas and some 10 annas per day. Timekeepers and mistries get monthly pay. Timekeepers' scale is from Rs. 20 to Rs. 50 per month and mistries from Rs. 20 to 60. There is no certainty of service for these people. They may be of 20 or 30 years' regular service; they are stopped at any time and when the work establishment fund is spent they do not get any allowance, even cycle allowance. There is no provident fund nor pension. They have to supervise the work of long roads within 38 miles every day on cycle.

## THE GOVERNMENT OF THE UNITED PROVINCES.

## PREFACE.

This report has been prepared by Mr. S. P. Shah, I.C.S., Director of Industries, United Provinces, from material available in the Secretariat, and in the offices of various departments of this Government, and from memoranda supplied by the heads of certain departments. The time allowed for its preparation did not permit of the making of any special inquiries into matters on which information was not readily available. The report does not deal, except incidentally, with questions relating to railways and mines. Information about these will be supplied by the departments of the Central Government concerned. The report is, as far as possible, a statement of matters of fact. The Government should not be understood as necessarily committed to any expression of opinion or suggestion contained in it, unless where it is made clear that this embodies their considered conclusions.

## INTRODUCTION.

**The Province.**

1. *General.*—The United Provinces stretch from the plains of Bihar on the east to the plains of the Punjab on the west and from the low mountain ranges of Central India on the south to the immense Himalayan barriers and submontane low-lying belt dividing British India from Tibet and Nepal on the north. Excluding the three Indian states (Rampur, Tehri and Benares) they cover an area of 106,000 square miles. In 1921, when the last census was taken they had a population of just over forty-five millions. (These figures compare very closely with those of the British Isles with its 120,000 square miles of area and 46 millions of population).

They form one of the major provinces of India. In population and area, they approach closely to Bengal and Madras, and in area to Bombay. They fall into four physically distinct tracts, viz., the Himalayan districts, the sub-Himalayan tract, the extensive Gangetic plain and a portion of the Vindhyan hill system of Central India. The first two are infertile and support a very sparse population. The Vindhyan plateau is almost equally infertile though better populated. The Gangetic

plain is very fertile and the density of the population per square mile rises from 512 in the west to 559 in the centre and 718 in the east. The average density of population for the whole province is greater than in any other province of India.

*Historical.*—Historically they are more important than the newer maritime provinces which since the advent of British rule have in many directions outstripped them. It was in these provinces and the adjoining portions of the provinces of Delhi, Punjab and Bihar that *vedic* culture grew up; it was here that the mighty Indo-Aryan empires of old (Maurya, Gupta and Harsha) rose to power and decayed. The founders of two great religions one of which (Buddhism) still claims the larger part of eastern and south-eastern Asia as its adherents were born in, and their early activities were confined to this area. Some of the most celebrated centres of Hindu, Jain and Buddhist pilgrimage—Benares, Prayag, Ayodhya, Muttra, Kurukshetra, Hardwar, Kapilvastu, Gaya and the Himalayan shrines—are situated in this tract. Hindu mythology locates the centre of the tract under the sway of Indo-Aryan culture in the small town of Bithur not far from Cawnpore; this is very nearly the geographical centre of the present United Provinces. During the days of Muslim rule in India, this tract was the centre of Muslim power and Islamic culture in India. Delhi, Agra, Lucknow and Dohband are easily the most renowned names in the history of Muslim rule and culture in India. Even to-day this tract has, proportionately to its size and population, the largest number of universities in India, including the two which represent the effort of the two great communities to keep alive their distinctive culture and outlook. This bird's eye view of past history has been given as it has an important bearing on the economic and industrial structure of the United Provinces and therefore on the conditions and problems of labour engaged in industry and on plantations.

#### Its industrial system.

3. *Industrial peculiarities.*—While the Gangetic plain renders the province one of the most important in India from the point of view of agriculture, it possesses some remarkable peculiarities which militate against its industrial progress. Though its natural resources are immense, they are confined to the produce of agriculture and the forests. Mineral wealth is almost non-existent. The generation of hydro-electricity by Government enterprise is only a recent development, and in the main has yet to be harnessed for the benefit of industry. Though the vast and in the eastern districts congested population furnishes immense man-power, tradition, social custom and hereditary proclivities hamper industrial progress. The landed aristocracy has been indifferent to trade and industry. Even the middle class, which in other countries has formed the backbone of industry and commerce, has been numerically and financially weaker in the United Provinces than in some other provinces; it has preferred to remain content with a livelihood derived from rents or service, and has for long tended to be disdainful not only of manual labour but also of trade and industry. Labour is comparatively immobile and trained and stable industrial labour is scarce. Except in artistic handicrafts an industrial tradition is lacking. The important large-scale industries are, in the main, in European hands. Banking is undeveloped. Mechanical engineers have still, to some extent, to be brought in from outside. The essential elements of an atmosphere favourable to industrial growth, especially indigenous enterprise—coal or other source of cheap power, minerals, even good cotton, finance, engineering skill, tradition, aptitude and incentive, trained and stable labour—are still, broadly speaking, non-existent. In addition to these internal difficulties, there are still wider factors which hamper the growth of industries in the province, e.g., the start gained by other nations and even provinces, powerful vested interests and the lack of control over tariffs and currency. The growth of industry has all the same been considerable. During the years 1922 to 1927, the number of regulated factories rose from 255 to 354 (i.e., nearly 39 per cent.) and that of factory workers from 72,545 to 88,319 (i.e., nearly 22 per cent.).

In cottage industries, especially in artistic handicrafts, the position is substantially different. Having for ages been the fountain-head of Indian culture, both Hindu and Muslim, the tradition of artistic handicraft set and developed by the court and the aristocracy is still alive. The silks, brocades, embroidery, *tarkashi* (gold and silver thread making) and brassware of Benares, the carpets of Benares and Mirzapur, the muslins, silks and fine cloths of Mau and Mubarakpur, the *jamdani* fabrics of Tanda, the prints of Azamgarh, Lucknow, Farrukhabad, Agra, Muttra and Jahan-girabad, the carved ebony work of Nagina, the wood-carving of Saharanpur, the marble and alabaster work, dyeing and printing, *durries* and carpets of Agra, the furniture of Bareilly and the artistic brassware of Moradabad—all these are still living and in certain cases prosperous cottage industries employing thousands of men, women and children. Although the capricious vicissitudes of taste have given an encouragement to some and allowed others to reach varying stages of decay, the position of the cottage industries is still strong except in the case of plain

hand-weaving of cotton. That of several artistic cottage industries has been, if viewed broadly, almost steadily improving. Perhaps in no other province of India do cottage industries still occupy such a relatively important position in the total industrial system as they do in the United Provinces and the adjoining tracts. At the 1921 census the number of cottage workers was found to be nearly two and a half million (1·43 males and 0·9 females). They were over 25 times as numerous as workers in factories. Leaving out the industries of the village artisans (pottery, shoes, agricultural implements and other simple rural needs) cottage industries produce an immense range of articles—both necessities and luxuries. Their organization is simple. Normally a small local financier advances money or material and buys and distributes the finished product. The system is suited to the condition and genius of the province, as the time devoted to such industries is often the spare time—usually seasonal—of agriculturists and their families. Hired labour is seldom employed. The most important cottage industry is textiles, over 800,000 souls being wholly or partly dependent on it. Wood-working and basket-making, metal working and leather industries come next in order of importance.

The United Provinces used to have indigo plantations, but as in Bengal and Bihar, they were driven out of the field by synthetic indigo and other dyestuffs. The tea industry was introduced in certain hill and submontane tracts, but now survives only in the *Dun* portion of the district of Dehra Dun. This is the upland part of the valley bounded by the Himalayas and the Siwalik hills. These small tea plantations of Dehra Dun are now about the only plantations that remain in the United Provinces. A few sugar plantations exist in Gorakhpur and Rohilkhand divisions, but these would be more accurately described as better-managed and biggerish private sugar cane farms than as plantations. Their labour is mostly local and not imported and it lives in the adjoining villages rather than on the plantations themselves. Mechanical agricultural appliances and other forms of organized capitalistic agriculture are not, as a rule, employed, and sugar-making factories are often owned and managed by persons other than those who cultivate the sugar cane.

4. *Industrial divisions.*—The United Provinces are essentially agricultural rather than industrial and commercial. The great mass of the people are simple peasants with few interests outside their village life. Only 106 out of every thousand live in towns. The portion of the population which is engaged in professional, industrial and commercial pursuits forms but a small fraction of the whole; 767 per mille are dependent for their livelihood on agriculture and only 162 on trade and industry. The essentially agricultural character of the province is further illustrated by the fact that though the province contains a large number of towns, the urban population (a little under 3,000,000) is divided between a multitude of petty townships and a few large cities, towns of medium size being comparatively rare. The smaller towns are either themselves largely agricultural or market towns almost entirely dependent on agriculture. Even among cities there is none without a considerable agricultural interest.

Of the seven cities (i.e., towns with a population of over 100,000), two are altogether unimportant in the industrial system of the province, and four others are not so important as they might be judging from their age, historical associations and other circumstances favourable to industrialization. An individual account of the important cities and towns will be given later.

Leaving out Cawnpore the western districts of the province are far more urban and industrial than the eastern. Taking the Meerut and Gorakhpur divisions as examples, the following figures which are fairly typical will illustrate this point:—

	Percentage of population.									Number of towns.			Number of factories.					Factory population in 1928.							
	Cultivators.	Agricultural labourers.			Industry.	Trade.	Transport.	Miscellaneous.	Urban population.	Rural population.	Non agriculturists as percentage of rural population.	5,000 to 10,000.	10,000 to 20,000.	20,000 to 50,000.	50,000 to 100,000.	Over 100,000.	Employing up to 100.	Employing 100 to 200.	Employing 200 to 300.	Employing 300 to 500.	Employing 500 to 1,000.	Employing 1,000 to 2,000.	Employing over 2,000.	Excluding sugar factories and the railway work-shops.	
Meerut ..	42	9	21	6	1	13	16	84		50	42	12	5	2	1	33	13	1	—	1	—	—	—	4,096	
Gorakhpur	75	10	6	3	—	3	4	96		22	9	5	—	1	—	1	3	1	4	2	—	—	1	—	304

It would not, however, be correct to think regionally in connection with the industries of the province, because unlike the conditions which obtain in Europe and America, industrialization in the United Provinces goes almost *pari passu* with urbanization. Thus, while Cawnpore city has sixty-three factories and an industrial population of 32,142, the area round about Cawnpore has no industry to boast of. Owing to this tendency of industry to concentrate in the towns, such towns rather than patches of the countryside including and surrounding such towns are the units of division to be considered.

But important factories located in small unimportant towns are not unknown. It is only natural that some sugar and cotton ginning and pressing factories should be found in the rural areas; but a glass factory in the small town of Bahjoi, a cotton mill in another similar town, Ujhani, an engineering workshop at Roorkee are examples to prove that while concentration in the towns is the rule, exceptions to it exist.

5. *Industrial towns. Cawnpore.*—Though only a few decades old, this city dominates the industrial and commercial life of the province. It is situated on the banks of the Ganges and at the junction of four important railways (the East Indian railway, the Great Indian Peninsula railway, the Bombay, Baroda and Central India railway, and the Bengal and North-Western railway) and of two Grand Trunk roads (Calcutta to Peshawar and Bombay to Lucknow), and thus commands a very favourable situation for the distributing trade; in this respect it is, with the exception of Delhi, probably the most important in northern India. Its industrial importance is not more than about 70 years old. It was originally an emporium of the raw cotton grown in the Ganges-Jumna *doab* and in Central India, and the entrepôt from which it was sent down by river to Calcutta. The first cotton mill in northern India was established here in Lord Elgin's time (1864). The Army Department of the Government had even before that set up a tannery and harness and saddlery factory which still flourishes. Round this nucleus has grown up the modern town. In 1921, it had a population of over two lakhs and was the second city in the United Provinces. It is not only a microcosm of the organized industry of the province; it really dominates it. It can afford to boast "*la système industrielle et commerciale des provinces unis-c'est moi.*" Nearly 19 per cent. of the factories (including most of the largest-sized) are located there; 37 per cent. of the factory-labour employed in the province earns its livelihood by working in them. It has ten cotton mills, three woollen mills (one of which is the most famous in India), numerous tanneries and leather-working factories, some engineering workshops, and numerous oil, cotton ginning and pressing, sugar-refining, distilling, chemicals, flour, hosiery and miscellaneous factories. Numerous banks maintain branches at Cawnpore. It is the headquarters of the United Provinces Government's Department of Industries and of the boilers and factories inspectorate. The two most important chambers of commerce (the Upper India and the United Provinces Chambers) and the most important labour union (*mazdûr sabha*) have their offices there. It has the credit of possessing the two largest industrial syndicates in northern India embracing various industries (cotton, woollen, tanning and leather, engineering, sugar, electric supply, etc.). It has a progressive municipality and a statutory improvement trust charged with the duty of opening up congested areas, and guiding the future development of the city along modern hygienic lines. The city possesses numerous educational institutions, including the foremost institutions for agricultural and technological research and teaching in the province. It is the only city in the United Provinces with an electric or in fact any tramway. In industrial importance it eclipses all the older—though historically far more famous—cities (Benares, Lucknow, Agra, Allahabad, Bareilly) and towns.

Lucknow has a cotton mill, a paper mill and the East Indian railway workshops; it has also a distillery, a sugar refinery and a flour mill. But the total number of factories and the strength of labour employed in them are as nothing compared with those at Cawnpore. Yet it is difficult to see why Lucknow should have lagged so far behind. It had already become British Indian territory before Cawnpore started on its industrial career. It had for nearly a century been the capital of the *nawab-wazirs* of Oudh, and was thereafter the capital of the province of Oudh. When Cawnpore was no more than an agricultural village, Lucknow was already a very important city with flourishing cottage industries. It too is situated on the banks of a river in a healthy and very fertile tract. It is only 45 miles from Cawnpore, and as regards road and railway communications, can almost rival Cawnpore. As regards cheap labour supply, it is even more favourably situated. The capital of one of the two provinces, it holds many of the United Provinces Governments departmental and secretariat offices. It has, however, been content to leave to Cawnpore the leading role in the commercial and industrial life of the United Provinces. Nevertheless, as was to be expected, its cottage industries are more important than those of Cawnpore.

That it possesses the only school of arts and crafts and the only college of music is appropriate; the situation of the technical school there is only an accident due to the fact of the railway workshops being there.

Agra, the renowned capital of some of the mighty Mogul emperors has, with the exception of four cotton mills, no large-scale industry to boast of. But in the field of cottage industries, especially in artistic handicraft, it can challenge any other town in the United Provinces. Agra durries (cotton carpets) and carpets marble, stone, and alabaster work, artistic jewellery, gold and silver embroidery, dyeing and printing and leather-working—are cottage industries which enjoy a reputation extending beyond the borders of the United Provinces.

Benares, the most important centre of Hindu pilgrimage in India, resembles Agra in many ways. Of large-scale industry it has nothing more than a medium-sized cotton spinning and weaving mill. But for varied cottage industries, it outstrips even Agra. Its silks and brocades and brassware are world-famous. It has numerous factories for the manufacture of gold and silver thread and kalabattu. Its embroidery is still famous. There are some small factories for the manufacture of aluminium ware. At Shivpur (about five miles from Benares) there are two hemp-baling factories. It had an extensive industry in toy-making which is now decadent. Its stone work commands more than a local market. The Hindu University of Benares maintains a well-equipped engineering college and workshop. The millions of pilgrims and hundreds of tourists who visit it help to maintain a busy trade in the products of the local cottage industries.

Bareilly lies at the junction of the East Indian railway with a branch of the Rohilkhand and Kumaun railway, which places it in command of the produce of the United Provinces Government's Himalayan forests. It is therefore naturally the most important wood-working centre in the United Provinces. It possesses a rosin and turpentine factory, formerly owned and managed by the United Provinces Government but now in the hands of a private joint-stock company in which Government still hold a very large interest. The only large-scale match-making factory in the province (with a daily capacity of 1,500 gross which it is proposed to raise to about 5,000) is at Bareilly. Government had established a bobbin-making factory there, but the bobbins could not stand in competition with imported ones, and this factory is now out of the field. There is a kattha-extracting factory, and within a short distance of the city a medium-sized workshop owned and managed by the Rohilkhand and Kumaun railway. The furniture industry of Bareilly supplies a large proportion of the needs of the United Provinces, but the whole of it is carried on on cottage lines, and most of the villages on the outskirts of the city also get some employment in this industry. The provincial wood-working institute and the wood technologist's office are both located there.

Allahabad (or rather Naini, a few miles from Allahabad) has two glass factories, of which only one is of importance. Allahabad has also two sugar refineries and a number of printing presses including the United Provinces Government Press. There is also a biggish flour mill. Otherwise, its industries are negligible.

The important cantonment town of Meerut—though a city—has little industrial importance, except for a roller flour mill.

Among the medium-sized towns, Moradabad, Saharanpur and Mirzapur and a few others need mention. Each has a cotton mill; and Saharanpur has also a flour mill and a tobacco factory. Each has one or more specialized cottage industries. Moradabad brassware is famous; Mirzapur has carpets, simple brassware and lac and shellac; Saharanpur goes in for woodcarving. Dehra Dun with its tea-plantations and the factories working in conjunction with them is a growing town, but its prosperity is due rather to its mild climate than to its tea industry. Jhansi and Gorakhpur have large-sized railway workshops.

Among the smaller towns, the pride of place goes to Hathras in Aligarh district. At the junction of the East Indian Railway and the Bombay, Baroda and Central India Railway, this town with a population of a little under forty thousand boasts of three cotton spinning mills some ginning and pressing factories and a small engineering workshop to serve the needs of the local mill industry.

*Other industrial areas.*—Cotton ginning and pressing factories are dotted all over the cotton growing areas of the province. There are sugar-cane crushing or refining factories at Cawnpore, Unao, Lucknow, Rosa, Pilibhit, Allahabad and in the Gorakhpur district. There are also a few rice milling factories. Cotton ginning and sugar and rice factories are "seasonal." Of the twenty-one oil mills in the province, ten are in Cawnpore city. Apart from the railway workshops at Jhansi, Lucknow, Gorakhpur and Izatnagar (near Bareilly) there are a few engineering workshops and foundries, the chief being the Empire Engineering Company at Cawnpore and the

Canal Foundry at Roorkee. Besides the two glass factories at Allahabad, there are important glass factories at Bahjoi and Balawali, and smaller glass works at Firozabad and a glass factory at Shikohabad. Cawnpore has two brushware factories and Ghazipur has a Government opium factory. Considering the forest resources, there are few saw-mills. There is one sandalwood oil extraction factory. The printing industry (with sixteen presses under the Factories Act and a labour force of about 4,000) is of some importance. Flour mills, ice factories, water and electric supply stations, dairy, bone-crushing mills—such miscellaneous factories will be found dotted all over the province. There is even one small scale but prosperous steel-rolling factory at Cawnpore. A new arrival in the industrial field is a factory for making "Hume" pipes.

6. *Centres of cottage industries.*—The location of some of the cottage industries has already been described. Hand-weaving of cotton is still the most important of these but it is gradually declining. In 1921, cotton spinning, sizing and weaving supported 820,000 souls. It has no particular location, though certain centres (Mau, Mubarakpur, Tanda, Muzaffarnagar, etc.) enjoy more than mere local renown and custom. In the hills, hand-weaving of cotton, wool and hemp is still extensively carried on, though here too the powerful competition of the mill-made product has begun to be felt, and with improved communications is bound to grow acute as time passes. The essential character of Bareilly cotton carpets and furniture, Moradabad and Benares brassware, Mirzapur carpets, Benares, Mau and Azamgarh silks, Agra marble work *zardozi*, carpets and *durries*, Cawnpore *durries* and tents, etc., as cottage industries has already been mentioned. Firozabad glass work is also carried on on cottage lines. Kanauj and Jaunpur still carry on their age-old "scented oils" industries. The manufacture of chewing tobacco is a considerable minor cottage industry at Lucknow. Mirzapur still supplies a good deal of the requirements of stone and ballast.

7. *Characteristics of cottage industries.*—The chief characteristics of cottage industries in the United Provinces are that in general they are not on a capitalistic basis and that the workers usually have a subsidiary occupation; this normally is agriculture. Though they provide a large population with their livelihood, there are few wage-earners. The worker and other members of the family irrespective of age or sex supply all the labour needed. The buying of raw materials and the disposal of the finished goods are also matters in which the whole family share. It is true that the usual agency is, in both cases, a middleman; co-operative effort has been tried but has, broadly speaking, not yielded satisfactory results. But the noteworthy point is that little hired labour is employed. Not that it is unknown, but that from the point of view of industrial wage-earning labour, the proportion is insignificant. The training up of labour is on the traditional informal apprenticeship system and is usually confined to relatives and castemen.

### The Background.

8. In an essentially agricultural province which relies for even its small factory labour (86,531 in 1928) mainly on landed or landless agriculturists, agricultural conditions must form an essential background to any picture of labour conditions. A glance at it is necessary to a correct and sympathetic understanding of the picture.

9. *Land-tenures.*—So far as the United Provinces are concerned, there are three parties to be considered, the landholder (*zamindar*), the tenant and the labourer. These three classes, however, often merge; a man may be both landholder and tenant, or both tenant and labourer, or in rarer cases landholder, tenant and labourer, in relation to different plots of land. The first is the person who pays direct to Government the land revenue assessed on the land, the tenant is the person who holds the land on a lease from, and pays rent to, a landholder. The agricultural labourer works on a tenant's or landholder's land in return for wages. Large landholders are few except in Oudh. According to an enumeration made in 1920, 203 paid revenue of Rs. 20,000 or more; the total number of those who paid Rs. 5,000 or more was 889. At the 1921 census just over 800,000 persons (including families and dependants) were returned as landholders. These figures show strikingly that though a considerable area is held by a few large landholders, especially in the province of Oudh, the province is, in the main, one of small proprietors. With each successive generation, landed property becomes further and further sub-divided, and in consequence individual shares go on getting reduced in value. The tenant—the "middle class" of agricultural economy—is the real backbone of the agricultural population; he constitutes by far the largest section of it. Including cultivating proprietors, the number of tenants, their families and dependants returned at the 1921 census was twenty-nine millions. The holdings are generally small and scattered; only in the

western districts do they, as a rule, approach considerable dimensions. Nearly all castes practise agriculture, but the *Jats* of the western districts, *Kurmis* of the central and eastern ones, and *Kachhis* in the eastern ones are the best farmers. *Brahmins* and *Thakurs* usually make poor agriculturists. The labourer is of far less economic importance; the total number in 1921 was four millions. The tenant outnumbers him by more than seven to one. (The proportion in England and Wales is 1 : 3.6). Less labour is used because the cultivator of the ordinary small holding relies for labour largely on himself and his family and comparatively little upon hirelings. Owing however to the operation of two causes (increased demand and reduced supply) the agricultural labourer's lot is improving. In 1911, thirty-seven out of every thousand labourers were also tenants; in 1921, the figure rose to sixty-six.

10. *Competition between land and industry.*—Agriculture steadily grew more and more lucrative between 1911 and 1919 especially during the war. Even though in the succeeding years the high water mark of 1919 has not been maintained, the ebb has not been considerable. But the progressively lucrative character of agriculture is not the sole explanation of the rising proportion of "landed" labourers. The holding of land (even as a tenant) confers a prized social status, and the labourer (whether agricultural or industrial) yearns for it. Hence the land-hunger which, especially in the congested portions of Oudh and the eastern districts of the province, sometimes leads to the payment of heavy premia (called *nazrana* or *salami*) for securing footing as a tenant. Hence also the constant tendency of even industrial labour to go "back to the land." Such labour must, in the nature of things, be and remain unstable. Its hankering to save must affect its standard of life in the industrial centres. The problems of impermanence, excessive turnover, uneven sex-ratio and its consequences, health, medical treatment, dietary, education and "higher living" in regard to industrial labour have all to be viewed against the background of this ambition to return to the land.

Another noteworthy point is the effect which the lucrativeness of agriculture has had and is having on the recruitment of emigrant labour, especially for industry. With the exception of a slight setback in 1911, the rise in the price of agricultural produce has been progressive. During 1918 and 1919 prices flared up all of a sudden. Rents and wages were bound to rise in sympathy, but as usual prices have completely outstripped both in the race. Throughout the province, the cultivator has considerably improved his position in the last twenty years, though it is not now as good as it was in 1919. This has necessarily affected industries. Apart from a certain degree of conservatism and immobility innate in the Indian social structure, the lucrativeness of agriculture has kept labour back from migrating to the towns, even though higher wages for both industrial and domestic labour are offered in the towns. Owing to this reason the industrial centres have naturally had to rely for their permanent and semi-permanent labour in non-seasonal industries on those parts of the province in which owing to the pressure of population on land agriculture is not so lucrative as elsewhere, and much less so than labour in industry. This will be discussed in further detail in the chapter on "Recruitment"—"sources of labour." Here it will suffice to show that the eastern districts of the province—Gorakhpur, Benares and Fyzabad divisions are the most congested and are therefore the most fruitful recruiting ground for emigrant labour. It is in these districts that land-hunger is the most acute, and has prevented capital from being invested in industrial enterprises to the extent known in the western districts. The general level of wages both urban and rural is also lower in the eastern districts than elsewhere.

11. *Pressure of population on land.*—In paragraph 1 have been given figures of the density of the population per square mile in the western, the central and the eastern districts of the province. The average density is greater than in any other province of India. On paper it is less than in either England or Belgium (a country where owing to small and scattered holdings, agricultural conditions are to some extent similar). But the United Provinces have no equivalent to the large masses of people in those countries living in the towns and dependant on the professions, commerce and industry. Again, large tracts (hills, ravines and *usar* land) are infertile and sparsely populated. There are also the forests—mostly unpeopled—which cover 14,000 square miles, i.e., nearly one-eighth of the total area. Even then as compared with the British Isles, the population in the United Provinces is denser by some forty persons to the square mile.

An equal division of the land would give each cultivating family about five and a half acres. But the holdings in the western districts are larger than those in the central and these are larger than those in the eastern ones. After making an allowance for "allotment-holders" (i.e., the area held by village artisans, officials and others), it has been estimated that the average holding in the western districts is six and a

half acres ; while in the eastern, it is three to four acres (four in Gorakhpur and Basti and 3·4 in Azamgarh), and even this is more scattered than in the west. Tiny plots situated all over the home-village and adjoining villages are the normal condition in the east. Unlike the small holdings in the countries of Western Europe, small-farm agriculture in the United Provinces is, as a rule, of the "extensive" type, though intensive farming by certain agricultural castes is not unknown in the western districts.

12. *The foundation of efficiency of industrial labour.*—This fact, viz., the far greater pressure of population on land in the eastern districts leading to emigration to other parts of the province and to other provinces and countries has to be borne in mind in connection with the efficiency of industrial labour. Whatever the ultimate reasons—ethnological or climatic or both—the rural population in the west is physically superior and mentally better equipped than in the east. There is more education, capital and enterprise ; the contribution to the army is also much greater. The climate is not so highly enervating ; there is an intensely cold and dry winter ; the summer though hot is dry and not so relaxing. Unfortunately for industry it has, in the main, to rely on the eastern and central eastern districts for the recruitment of industrial labour.

13. *Alternative occupations for surplus cultivators and for industrial labour.*—The United Provinces used to have numerous cottage industries, and these used to provide alternative occupations—often of a seasonal character. But with the steady and sure competition of large scale industry helped by improved communications, these have been declining. Sugar-making and hand-weaving are the two chief cottage industries which have steadily declined in this manner. In one of the main subsidiary industries, hand-weaving, only eighteen in every 10,000 cultivators and eleven in every 10,000 field labourers are also hand-weavers. Even in smiths' work, etc., the proverbial economic self-sufficiency of the village is daily going down. The same conditions are reflected in the industrial centres. Subsidiary occupations are almost non-existent there ; even the womenfolk do little in this way besides cooking, washing, and other similar domestic work. Simple household work like plain tailoring, embroidery, crochet work, etc., is almost unknown..

14. *Health and education.*—The overwhelming majority of the rural population is used to ignorance, poverty, disease and ill-health. Only 3·7 per cent. of the population was literate even according to the low standard (capacity to read and write a simple letter) adopted at the 1921 census. Among the rural population, especially in the classes from which industrial labour is drawn, the percentage even of mere literacy is much lower. Simple vocational training—the use of carpenters' and smiths' tools—is almost non-existent. The death-rate (though lower than of five other major provinces) is about twenty-eight per mille—almost 150 per cent. more than in the United Kingdom. Serious diseases are endemic in some parts, and unceasingly take a heavy toll of life and energy. Malaria, small-pox, plague, cholera, enteric, dysentery, and tuberculosis—to mention only the leading diseases, some of which seasonally break out in an epidemic form and in some districts are almost perennially endemic, involve a huge loss of efficiency and output even when they do not prove fatal. The standard of life too is much lower. All these facts—ignorance, poverty, dirt and disease—have an important bearing on the quality and conditions of industrial labour even in the towns. The labourer's outlook is extremely narrow and produces in him an attitude to look upon his lot as one ordained by the fates and therefore not capable of much improvement by his personal exertion. Such a cramped outlook on life and fatalism help to perpetuate in the industrial centres the conditions which obtain in the rural areas and seriously handicap the reforming efforts of Government, the employers and private organizations.

15. *Caste.*—The system of caste has also an important bearing on the problems of industrial labour. Castes are to a large extent vocational and for a man of one caste to do the work normally done by other castes usually involves a sense of social degradation. Hence the recruitment of labour for industries and plantations normally tends to be confined to those castes which have for generations been engaged in the branch of industry in question or to the lower castes which have always furnished their quota for all forms of labour. It is true that the rigidity of the caste system tends to break down in the different environment of an industrial centre and that the system as a whole is getting lax. But no study of industrial labour conditions in India can yet afford to rule caste out of consideration. The castes which normally supply labour for industries and plantations have been discussed in a note (appendix I). A table showing the percentages of the labour employed in a representative cotton mill at Cawnpore has also been given.



The fact that in a particular industry different stages are still in the hands of men of different castes has an important bearing on the relations between the various groups engaged in the industry. Purely industrial questions often tend to take the form of disputes between castes or communities. These sometimes take an acute shape not warranted by the nature of the difference if viewed from a purely industrial standpoint.

### I.—Recruitment.

1. Of the three types of industries in the province only one—the western type on factory lines—relies entirely on hired labour. Cottage industries and those of the village artisan are in the main carried on by the workman's own labour and that of his family. Certain cottage industries, especially some of the artistic ones, employ a little hired labour.

Factory labour is still, generally speaking, drawn directly from the villages, and only to a small extent from the industrial towns. A large majority of the factory workmen drawn from the villages are small agriculturists, or surplus members of agricultural families; or agricultural labourers, cottage workers, or artisans, with whom agriculture is a subsidiary occupation. They are attracted to industry with difficulty, and usually retain a constant desire to go back to the land or to their village as soon as they have made a little money or the reason which led them to enter the ranks of factory labour has disappeared. The proportion of workmen of rural origin who have severed their connection with their village and with agriculture is small. These are usually skilled workers in the important centres of factory industry.

(i) The reasons which lead to migration to industrial centres are numerous, but the following are among the chief. Owing to the progressive sub-division of holdings the share of land held by the workman or his family may be too small to support them. Ejection from the holding for various reasons may render migration necessary, especially in the congested parts of the province where the competition for land is very keen. The workman or his family may have an ambition to effect improvements in the ancestral holding or to rise, in the social scale by adding to it, and he may therefore venture out to seek his fortune abroad. A friend or relation engaged in a factory or a recruiting agent may hold out the prospect of more remunerative employment than can be had in the village. The cottage worker may find himself hard pressed by the competition of organized industry, and may either give up his hereditary occupation and confine himself to agriculture or migrate to an industrial centre and take up work in a factory doing work related to his ancestral occupation. Domestic troubles may force a man to leave home. Landless labourers, illegitimate sons and those who for various reasons are ostracized by the village society may find themselves compelled to leave home; and some of them take up work in factories. Temporary causes, like a failure of the rains or damage to the crops, may also lead to temporary migration.

Migration of four types may be considered: (1) Internal migration within the province; (2) immigration into the province; (3) emigration to other provinces, and (4) emigration abroad.

(1) Every district shows some migration of this type to the nearest industrial centre, but its extent is small. The chief districts which gain from this type of migration are Cawnpore and Dehra Dun. At the 1921 census one of the particulars recorded about each person was the district of his birth. About half the population of Cawnpore city were then found to be immigrants, 5·2 per cent. from the rural parts of Cawnpore district, 24·3 per cent. from adjacent districts, and 18·3 per cent. from elsewhere. Cawnpore city had the largest immigrant element of all the cities and towns. This was almost entirely due to the opportunities for business and employment in industrial and business concerns in that city. The chief districts which send emigrants to Cawnpore are the adjoining districts of the province of Oudh and the districts of the Allahabad, Benares, and Gorakhpur divisions. A table abstracted from the last census report shows details of the immigration from various districts into Cawnpore.

Dehra Dun attracts numerous classes of immigrants, including labourers for the tea gardens, especially from the neighbouring districts. A good proportion of immigrant labourers from the neighbouring districts are seasonal and not semi-permanent immigrants. Dehra Dun does not attract many immigrants from the most eastern districts of the province. But the eastern districts of the provinces of Oudh furnish a good deal of labour for the tea gardens, and this, as is proved by the fairly high proportion of females, is semi-permanent (see following table for all classes of immigrants).

*Details of emigration from some of the United Provinces districts to Cawnpore and Dehra Dun districts, 1921.*

From districts of emigration.	To Cawnpore district.			To Dehra Dun district.		
	Males.	Females.	Per cent. of females to males.	Males.	Females.	Per cent. of females to males.
(1) Agra ..	1,400	896	57	254	221	88
(2) Farrukhabad	4,197	4,527	112·5	90	63	66·6
(3) Etawah ..	3,518	3,069	85·7	117	22	20
(4) Fatchpur ..	5,631	10,480	189	51	15	30
(5) Hamirpur ..	2,969	6,128	200	91	1	1·1
(6) Jaunpur ..	1,127	818	72·7	79	49	57
(7) Azamgarh ..	1,066	381	38	84	48	58·8
(8) Saharanpur	168	77	47	6,922	3,391	48·5
(9) Meerut ..	334	168	50	1,289	513	41·6
(10) Bijnor ..	84	57	70·5	2,585	1,187	48
(11) Garhwal ..	81	22	25	4,583	1,211	26·6
(12) Tehri State..	—	—	—	3,768	1,690	45·9
(13) Lucknow ..	3,850	3,166	78·9	547	181	37
(14) Unao ..	12,146	9,266	75	26	12	46
(15) Rae Bareilly ..	4,297	2,600	65	425	254	62·5
(16) Hardoi ..	2,170	1,749	85	143	33	21·4
(17) Fyzabad ..	1,343	711	53·9	342	205	57
(18) Gonda ..	1,301	554	42·3	411	223	50
(19) Sultanpur ..	1,993	1,050	50	519	304	60
(20) Partabgarh..	2,225	1,719	85	575	423	70·2
(21) Bara Banki..	1,716	930	52·9	785	435	55

(2) Immigration into the province is small and can be ignored. At the last census only 0·9 per cent. of the population recorded their birthplace as being outside the province, and a large proportion of these were immigrants due to marriage or to military and other non-industrial service. The province does not rely upon immigrant labour for its industries or plantations.

(3) *Emigration to other provinces.*—The 1921 census showed that the number of persons born in the province who were living in the more distant parts of India (excluding adjoining districts of other provinces) was 623,000 males and 202,000 females. Of these Bengal accounted for a little over 40 per cent., Bihar 14·5 per cent., Bombay a little under 14 per cent., the Central Provinces a little over 12 per cent., Assam a little under 10 per cent., and Burma a little under 9 per cent. Emigration is chiefly from the Gorakhpur and Benares divisions and from the adjoining districts of the province. Emigration of industrial or plantation labour is almost entirely to Bengal, Bihar and Orissa, Assam and Bombay.

Miss Broughton calculated on the basis of the 1921 census figures that 19·8 per cent. of skilled and 11·5 per cent. of unskilled workers in the Bengal factories were immigrants from the United Provinces, the actual figures being about 36,000 skilled and 68,000 unskilled labourers. Emigration to the mines of Bihar and Orissa accounts for a small fraction of total emigration, only 981 skilled and 1,056 unskilled workers when the census was taken. In the Tata works at Jamshedpur, 1,312 skilled (14·2 per cent. of the total) and 240 unskilled workers were United Provinces men. The emigration of labour to Assam is controlled by Act VI of 1901. Recruitment is permitted from the four divisions of Gorakhpur, Benares, Fyzabad and Jhansi, and from three districts of the Allahabad division. The average annual emigration for the last ten years has been about 4,000. The emigrant labour for Assam either goes to the tea gardens, or takes to miscellaneous employment. No statistics are available to show the extent of migration of industrial workmen to Bombay, but it is a well-known fact that a good deal of the labour employed in the textile mills of Bombay is drawn from the United Provinces. Some mill localities in Bombay are named after the localities in the United Provinces from which the workers originally emigrated to work in the Bombay mills.

(4) Since the enactment of the Indian Emigration Act of 1922 the emigration of unskilled labour to foreign countries is controlled. Hence emigration to the colonies has been considerably curtailed. During the decade 1901 to 1911 such emigration from the United Provinces amounted to about 180,000. The extent of it from 1911 to 1921 is not known. United Provinces men rarely go to Ceylon, but the eastern districts of the province send emigrants to the Malay countries. The proportion of labourers among such emigrants is, however, small. They are more usually petty tradesmen, pedlars, watchmen, and so forth.

(ii) The chief districts from which emigration takes place are Gorakhpur, Azamgarh, Basti, Benares, Ghazipur, Ballia, Jaunpur, Mirzapur, Allahabad, Fyzabad, Sultanpur, Partabgarh, Rae Bareilly and Bara Banki. These are all among the most congested in the province. The important centres which attract these emigrants are the industrial towns, chiefly Cawnpore, the Dehra Dun district, the coal mines and iron and steel works of Bihar and Orissa, Calcutta and its environs, Assam, Burma, Bombay, the Central Provinces and the Malay colonies and states.

The general causes which lead to emigration have already been described. Those which give rise to particular streams of migration are difficult to define. Local labour is sometimes not suitable for a particular type of work, and this fact often leads to migration from the nearest most suitable area. This is the reason why the immigrant tea garden labour in Dehra Dun district is to a large extent drawn from the eastern districts of Oudh but very little from the still more congested easternmost districts of the province. The successful career abroad of a pioneer emigrant sets an example which many others follow when circumstances compel them to leave their ancestral homes. A case is known in which an emigrant made a large fortune in Burma and thus brought about—in some cases assisted—emigration to that province on a considerable scale. In another case a pioneer emigrant to a coalmine near Nagpur gave rise to a stream of migration from his district first to coal and other mines in the Central Provinces and thereafter to those of Bihar and Orissa. The presence of relations and friends, especially if successful, in a particular centre is perhaps the most powerful cause of migration to the centre. The relation between the hereditary occupation and the work offering elsewhere is probably the next most important. Thus the high wages offered in the textile mills of Bombay caused the emigration of many weaving families from Benares, Azamgarh and the adjoining districts. Next in importance is perhaps the system adopted for recruitment. Organized recruitment such as is in operation for the supply of labour for the tea gardens and railways of Assam gives rise to systematic emigration in a way not otherwise possible.

(iii) The important post-war changes affecting migration are (1) the stoppage of fresh recruitment for the Army and the return of demobilised Army men, (2) the influenza epidemic of 1918–19, (3) the ebb of industrial prosperity since 1921–22, (4) the increased severity of the competition which cottage industries encounter from organized industry, (5) the remunerative character of agriculture, (6) the non-co-operation and other political and politico-economic movements, (7) the growth of trade unionism, (8) various forms of labour legislation, (9) steadily improving road and railway communications, especially the growth of motor traffic serving centres away from the railways, (10) the agrarian legislation of 1922 for the province of Oudh and of 1926 for the province of Agra, (11) the construction of a big canal system, (12) the legislation of 1922 for controlling emigration abroad, and (13) increased mechanization.

Some of these changes were favourable and some unfavourable to the migration of labour to industry and plantations. The stoppage of fresh recruitment for the Army and the return of demobilised men closed one great avenue of remunerative occupation, and enabled industries and plantations which had been to some extent starved for labour during the war to recoup themselves. On the other hand, the influenza epidemic swept away almost three million souls. This, combined with the industrial and commercial prosperity which was a characteristic feature of the few years immediately following the close of the war, pushed up the wages of all forms of labour, including industrial and factory labour. Since 1922, however, industries have not been as prosperous as they were during and after the war, and this and labour troubles have given some set-back to the desire to migrate to industrial centres; while the remunerative character of agriculture has provided an additional incentive to cultivating the ancestral holding. Some cottage industrialists, especially weavers, have had to choose between reversion to agriculture and emigration. The non-co-operation movement, which drew much of its strength from economic unrest and distress, gave rise to numerous influences adverse to migration to industrial centres and plantations. The *kisan sabha* (tenants' union) movement aimed at increasing the rights of the tenants as against their landlords. The bias imparted by the non-co-operation and subsequent politico-economic movements in favour of hand-spun and hand-woven cloth operated, though only temporarily, against the Indian mills; but in so far as these movements favoured the products of indigenous

industry in opposition to imported goods they supported Indian industries, including those organized on factory lines, and thus proved favourable to the migration of labour. The emotional forces generated led to a few attempts on the part of emigrants (e.g., Assam labourers) to return home and also to the birth of trade unionism in some places and its acceleration in others. Steady improvement in the conditions of work, the rise in wages, and various types of welfare work and improved communications kept the stream of emigration flowing. The agrarian legislation both in Oudh and Agra whereby tenancies at will were largely replaced by tenancies for the lifetime of the tenant, and the construction of the Sarda canal to serve the needs of a large agricultural tract, lying chiefly in Oudh, have made the cultivation of land more attractive and may have reduced migration. The construction work of this canal and the work in progress at New Delhi both provided a good deal of employment to labour from the adjoining tracts. The progressive though slow mechanization of industry has gradually enabled it to be carried on with fewer men, and has, therefore, weakened the demand for factory labour. The far stricter control exercised since the passing of the Indian Emigration Act of 1922 has proved an effective check on emigration abroad. The repatriation of Indians from South Africa has not affected this province much, because few United Provinces men had emigrated to South Africa.

The precise influence of each of these factors cannot be assessed. It is an undoubted fact that the emigration of labourers abroad has been lessened. The number of factories and of operatives engaged in them have both risen. Hence it seems safe to assume that on the balance the influence of the various recent changes has been favourable to the migration of industrial labour within the province.

(i) *Extent and frequency of return* and (ii) *Extent of permanent labour force*.—

While no statistics on this subject are available, it is a common complaint of employers against factory labour in general, especially unskilled labour, that being agricultural and rural at heart it does not settle down permanently to factory work in the towns, and that this causes great loss to the national industrial efficiency. But the problem arises seriously only in the case of the large industrial towns, as in other cases the labour is drawn from the immediate neighbourhood. Even Lucknow relies largely on such labour. Cawnpore is the town which is affected most by the internal migration of labour and, therefore, by the problem of the return of immigrant labourers. Figures relating to one important mill there show that in a particular year out of an average labour force of 2,129, 986 persons returned to their village. But as the labour "turnover" is not known, the frequency of return per individual employed cannot be deduced. This mill has a well-organized labour settlement, and is, therefore, likely to have a larger proportion of stable labour than others. The average duration of employment in it has been reported to be a little under nine years. The figure is somewhat doubtful, as the average was taken only of "permanent employees."

Generally speaking, the skilled worker, who has more or less severed his connection with his ancestral home and who has no ancestral holding, becomes reconciled to his new life, and his descendants rarely think of going back to the land. On the other hand, the unskilled labourer who has not cut himself adrift from his village ties is the least stable element of factory labour. Between these two extreme types the extent and frequency of return depend on various other considerations, e.g., sickness, "social events" in the family or among relations or friends, seasonal agricultural work, general industrial and labour conditions, conditions of life in the town and of work in the factory, the presence or absence of the family, the cost of the journey home and back and so on. If the workman lives in his ancestral home in the town or a neighbouring village, or has found a home in one of the few organized labour settlements, the chances are that he will stay on indefinitely.

The problem hardly arises in the case of labour employed in unorganized and cottage industries, or in seasonal industries so far as the general body of workmen is concerned. The workmen are mainly drawn from the neighbourhood and a large proportion are members of agricultural families who must go back to carry out the seasonal agricultural operations. This need is known to the employers of such men and their return to the village does not cause much unexpected disturbance. If factory work has to go on simultaneously with agricultural operations requiring much labour, substitutes are sometimes left or are found, or labour is hired or relations and friends are requested to carry on the agricultural work.

While the general proportion of female to total emigrant labourers is not known, some figures are available in respect of (a) immigrant labour largely intended for the tea plantations of Dehra Dun, and (b) labour emigrating to Assam. For the former the table on page 141 may be seen. The tea plantations of Dehra Dun import some of their labour from Oudh districts; the proportion of females to males among all immigrants, including tea garden immigrants, was found at the 1921 census to be 51 per cent. Labourers emigrating to Assam generally leave their families behind;

the proportion of females accompanying such emigrants has been reported to be less than one-fourth. On the other hand the expense and trouble of return severely restrict the desire of such workmen to come back frequently.

3. (i) Except for Assam there is no organized system for the recruitment of labourers or for controlling it. The methods followed are in the main on the traditional lines.

Mill hands are mainly recruited at the mill gate. When additional men are needed, the fact is communicated to the men already employed and they bring in their relations, friends or acquaintances. The usual agency employed for this purpose is that of the lower supervising staff (jamadars and sardars). Sometimes a jamadar or reliable workman or sardar is sent out on a recruiting campaign, but though this system was in great vogue in the very early days, it is rarely resorted to now. Recruitment through the agency of such "jobbers" is usually on the basis of remuneration per recruit. The system in operation in seasonal industries and on the tea plantations of Dehra Dun is essentially similar, though the sardar plays a more important part at the commencement of the season. If the workman is recruited from a far-off place, it is usual to pay for his journey to the industrial centre concerned.

Labour for the mines of the neighbouring provinces is usually recruited through the agency of sardars, who get a commission besides their salary.

Labour for Assam is recruited under Act VI of 1901, through the agency of licensed garden sardars. Labourers already engaged in the tea gardens come back and hold themselves up as examples to the people of a local area in which they have relations or friends. Previous to departure the recruits are registered by a local agent appointed under the Act.

(ii) *Possible Improvements*.—Mr. S. H. Fremantle, I.C.S., reported in 1906 on the supply of labour for United Provinces industries, especially those conducted on factory lines. His report contains some suggestions for an improvement of recruiting methods. But the conditions then prevailing are no longer in existence. There is no general complaint about the shortage of labour for provincial industries.

(iii) *Desirability of establishing public employment agencies and possibility of practical schemes*.—While in theory, public employment agencies should be able to assist recruitment, this Government's view, as communicated to the Government of India in December, 1921, was that in the present circumstances the sardar system of recruitment was on the whole free from abuse and was preferable to any other. In November, 1928, they again replied to the Government of India, that no appreciable change had taken place in the industrial and labour conditions of the province, and that some form of the sardari system of recruitment carried on by the industries concerned themselves promised the best results. In their opinion no useful purpose would be served by any action on the lines of Article 2 of the Draft Convention, proposed by the International Labour Conference.

4. No statistics are available to show the extent to which family life is disturbed by labourers having to leave their families behind when they migrate in search of work. In the case of the plantations and of migration to the smaller industrial towns the problem hardly arises. Cawnpore is about the only town where it exists to any considerable extent in connection with internal migration. The general sex ratio of that city as ascertained at the 1921 census was about six females to ten males. Among the labouring classes the proportion of females is probably smaller, but precise information is not available. In the organized labour settlements there is much less disturbance of family life than in the bastis. In the case of emigration to distant industrial centres like Bombay and Calcutta, disturbance of family life is a normal feature. Miss Broughton found the proportion of women to men among the United Provinces labourers in Bombay to be 11 to 89.

The workman who has left his family behind often clubs together with other workers, generally preferring relations, caste men, friends or men from his own village or town. Denied the comforts of a regular family life, the temptation to him to seek diversion after the day's work by resorting to drink or drugs or to the bazaar is greater. His life becomes monotonous and unattractive. If he falls ill, he often lacks proper care unless he has a friend or a relation to look after him. The desire to return home becomes a hindrance to sustained and efficient work. He has to remit home a portion—often a large portion—of his earnings and in consequence has to deny himself luxuries and even necessities. His real earnings are reduced by the necessity of keeping up two households. Owing to the prevalence of the joint family system among Hindus, and to some extent among Musalmans, especially in the rural areas, his wife and children are, generally speaking, looked after by his relations at home, but even so the effect on family life of these lengthy separations cannot at the best be desirable, while in some cases they lead to definite harm.

A detailed account of the legislation on the subject of recruitment for Assam previous to the Assam Labour and Emigration Act (VI of 1901) is given in Appendix A of the report of the Assam Labour Enquiry Committee, 1906. The evils prevalent under the old system of recruitment through contractors are referred to in paragraph 48 of that report. A notification in 1907 finally put a stop to all recruitment by means of contractors in this province. Since then cases of irregular recruitment have been rare : but the effect of former evils still remains in the form of a prejudice among the public generally against recruitment for Assam.

6. (i) The question of retention of control was examined by this Government in 1927. In their opinion the maintenance of some form of control over the recruitment of labour for Assam was still necessary. They considered that the sardari system of recruitment had worked satisfactorily in these provinces. As a result of the recommendation made in paragraph 508 of the Report of the Royal Commission on Indian Agriculture, the question was examined afresh. This Government replied to the Government of India that they were not convinced that the time was ripe for a removal of all restrictions on the recruitment of labour for Assam. In connection with a proposed revision of the Assam Labour and Emigration Act they replied to the Government of India giving their opinion about the directions in which existing restrictions might be relaxed. These were that sardari recruitment need not be restricted as now to certain areas, that recruitment by recruiters (other than sardars) under proper safeguards might be reintroduced and that the restrictions should be confined to the recruitment of labour for tea gardens and need not apply to that for railways, mines, etc.

(ii) *Administration of the present System.*—In this province the Director of Land Records and Inspector-General of Registration is also the Superintendent of Emigration. District magistrates and such full-powered magistrates as are nominated in this behalf by district magistrates are appointed as district superintendents of emigration. They are empowered to grant licences to "local agents" under the provisions of Section 64 of the Act.

In each recruiting district or other prescribed local area there is a "local agent" licensed under Section 64 to supervise the recruiting work of the "garden sardars." The Assam Labour Board supervises the work of such local agents. A local agent has to keep two registers—one containing the names, etc., of the recruiting garden sardars, who must be persons employed on the estates for which they are recruiting, and the other the names and other particulars of the labourers recruited and their dependants. Entries in the latter register are submitted monthly to the district magistrate. Magistrate and certain police officers can require a local agent to produce the recruit or his dependant before them. If an objection is made to the emigration of any person by any one claiming to stand in the relation of husband, wife, parent, or lawful guardian to the emigrant, the local agent is bound to report it for the orders of the magistrate. In the case of a woman emigrant unaccompanied by her husband, or lawful guardian three days must elapse before she can leave or be removed. There are detailed provisions to ensure suitable accommodation for the labourers recruited and their correct identification and to prevent fraud about wages and conditions of service and other misconduct on the part of the recruiting garden sardars.

In practice at the present time recruitment for Assam in this province is almost all conducted by one association, the Tea Districts Labour Association. Its operations in the province are directed by a European agent, with headquarters at Allahabad. Under him there are local agents at various places.

(iii) *Composition and Working of the Assam Labour Board.*—It is assumed that the Government of India will deal with this subject. Members of the Board occasionally visit the province to discuss matters connected with the administration of the Act, but its activities are mostly in Bengal and Assam.

(iv) and (v) Apart from the matters referred to in their correspondence with the Government of India, this Government have no fault to find with the existing system, except that in their opinion the present complicated Act might well be re-drafted and brought up to date. The demand for a relaxation of the present restrictions comes from Assam, and from those who think that as few restrictions as possible should be placed on any movement of surplus labour from the congested parts of the province. There is no popular demand for the removal of the restrictions ; while the land-holding and politically-minded classes are not in favour of encouraging emigration to Assam, for various reasons, of which the undoubted abuses of the past, before the introduction of the present Act, are one of the chief.

7. *Unemployment.*—(i) This Government have no information as to the extent of industrial unemployment. The number of persons employed in factories is still a small fraction of the total population and the number of skilled workers is smaller still. Hence it can safely be said that the general problem of unemployment is

negligible. The opinion expressed in October, 1928, by one of the Chambers of Commerce was that "there is no industrial unemployment in a general sense, nor can it be said that unemployment occurs sporadically among particular classes of workers or is a permanent feature of any of the industries of the province." The views of the other Chamber, the Director of Industries and the Chief Inspector of Factories were similar. On the other hand, some leaders of industrial labour held that some unemployment existed, especially among dismissed or discharged men. They could give no precise figures but agreed that unemployment did not exist on a large scale.

In cottage industries the position is even more satisfactory. It is true that some of these have been losing ground steadily. The numbers of persons engaged in cottage industries, including their dependants, as ascertained at the 1901, 1911 and 1921 censuses were 6.24, 5.83 and 5.10 millions respectively. The cottage industries which have been affected most are hand-weaving, certain classes of artistic work on cloth (e.g., *chikan*, *cardori*, *kinkhab*), country tanning and some minor artistic industries. But the men employed in such industries are not in the main wage-earners. They often have agriculture as a main or subsidiary occupation, and they or other members of their families can, and do take to general labour, and some migrate to the towns as industrial or domestic labourers. Temporary unemployment does exist to some extent among cottage workers, but the system in vogue whereby industrial work alternates with agricultural work, mitigates to a considerable extent the hardships of temporary unemployment. The Indian social system also to some extent helps men to tide over difficulties arising from unemployment. In the case of famine there is acute unemployment among large sections of the population owing to a failure of the crops; but the measures for dealing with famine have long been standardized and codified and hardly come within the scope of this memorandum.

(ii) *Extent to which unemployment is caused by retrenchment or dismissals or by voluntary retirement or by other causes.*—On this subject no information is available. Some labour leaders hold that dismissed and discharged men have difficulty in finding new employment. But the fact that the numbers of factories and of factory operatives have both been steadily rising and that only a small proportion are skilled workers permanently settled in the industrial centres goes to show that the number of men lacking employment from such causes cannot be large. Apart from the retrenchment recently introduced in the railway workshops no important retrenchments have occurred as far as is known to this Government.

(iii) *Possible methods of alleviating and remedying distress.*—This Government have no suggestions to offer on this point.

(iv) *Unemployment insurance.*—This subject has not been considered by this Government. But, judging from the facts ascertained in connection with certain proposed schemes (labour bureaux and sickness insurance) it appears unlikely that unemployment insurance is needed, or is practicable in the present stage of industrial development of the province.

(v) *Application of International Conventions relating to unemployment.*—Paragraph 3 (iii) may please be seen.

8. (i) and (ii) Labour turnover has not been investigated by this Government. All factories do not keep the detailed information which would be necessary in order to calculate it for the various classes of labour employed in any particular factory. The Government are unable to do more than quote a few instances brought to their notice but not tested or examined by them.

A certain mill at Cawnpore reported that the average duration of employment among "permanent employees" in it was 8.87 years. In the opinion of the Chief Inspector of Factories this figure is fairly representative of factories which provide housing accommodation for large numbers of their employees, and thus enjoy the benefit of a comparatively stable labour force.

The Chief Inspector of Factories found that casual employment in the larger and organized factories varies from 2 to 5 per cent. An important government factory however definitely stated to him that they employed approximately 17 per cent. casual labour. In the seasonal factories, particularly gineries and cotton presses, a large proportion, sometimes even more than half, is casual. The employees normally work a few days and then either return home or pass on to other factories doing similar works.

*Absenteeism.*—Apart from what has been stated in section (2) of this chapter this Government have no information relating to this problem. It is not unusual for men especially unskilled workers, to go on authorized leave and either to overstay it or fail to return altogether. Unauthorized absence is sometimes countenanced or condoned, especially if the man is a skilled worker and has satisfactory antecedents and can

explain the reasons which led him to go away or to overstay his leave. Chief among the reasons for absenteeism are sickness, "social events," or agricultural or other similar work at home. Unskilled labourers from neighbouring villages account for the largest extent of absenteeism from factories. But statistical information on the extent and the various forms of absenteeism among the various classes of labour and on the time and wages lost thereby is not available.

9. *Value of the Apprentices Act.*—Since the enactment of this law, circumstances have materially changed. Numerous orphanages are now maintained by the public at various important centres. They are usually communal or sectarian or denominational. Almost all of them maintain classes for imparting elementary general education and industrial training of some sort. Many receive grants-in-aid from Government for both types of general classes. Under the standing orders of Government, magistrates transfer to orphanages such orphans as are produced before them or come to their notice. Owing to these developments the Act has remained a dead letter. In 1922, when the Government of India took up for consideration the question of its repeal, it was found that few employers were aware of its existence on the Statute Book. No objection was raised to its repeal, as far as is known.

## II.—Staff Organization.

11. There is no clear cut and stereotyped system for the selection of the managing staff. It is possible, however, to examine and analyse the methods by which such staff is in practice recruited. The following examples are intended to illustrate the methods in common use :—

(a) In proprietary concerns (as distinct from joint-stock companies and state undertakings) management is undertaken by the proprietor himself or entrusted to some near relation of his. He is usually a non-technical man.

(b) In the case of joint-stock companies there is great diversity. In small companies the management is on lines similar to those in proprietary concerns. The manager is generally some relation or friend of the director who has the largest holding or influence. There is no free recruitment according to merit.

(c) In the bigger joint-stock companies there are two systems. Some companies have a managing director or secretary, whilst others have managing agents, appointed under a resolution of the shareholders for a long number of years and entrusted with full administrative and financial powers. The board of directors exercises only a general supervision over the work of the managing agents. The managing agents are generally a private limited liability company or a proprietary concern. The managing staff of the factory is appointed by the managing agents. Frequently the manager is a member of the managing agent's firm. Where this is not the case, or is not possible owing to the technical nature of the work, various methods of selection are adopted. The commonest amongst these is selection by negotiation from outside—either from another firm or from abroad. The appointment is made under an agreement for a fixed number of years but terminable after stipulated notice at any time. In order to give the manager an interest in the financial results of the company's working, it is usual to give him a percentage of profits in addition to his salary. When there are no managing agents it is usual for a managing director or secretary to perform the managerial duties directly under the board of directors. The recruitment of such officers is restricted to members of the board and the appointment is usually for a long period under an agreement similar to that with managing agents.

(d) Another method of selecting managers, prevailing mostly in big and organized concerns, is to appoint a junior officer either from outside or by promotion from the lower staff as an "understudy." In course of time the understudy replaces this superior officer.

(e) Recruitment by promotion of departmental heads or lower staff in consideration of long or specially meritorious service is also common.

(f) In state undertakings (e.g., the state railways) the system of competitive examinations for the recruitment of the superior staff is being adopted. The appointments thus made to the superior services are usually of an All-India nature.

12. *Recruitment and training of subordinate supervising staff.* (i) *Methods in force.*

(a) *For recruitment.*—The systems in common use are :—(1) In the majority of cases the subordinate supervising staff is recruited from intelligent and literate operatives. Those who show initiative, tact and capacity for controlling men get preference.

(2) In state railways and ordnance factories apprentices with suitable educational qualifications are given practical training combined with theoretical instruction. No guarantee of engagement on completion of apprenticeship is given, but as a rule many of the apprentices are absorbed. At first they are given ordinary workmen's jobs but are in due course promoted to foremen's positions.



(3) *Appointment by direct negotiation with men of rival concerns.*—Senior workmen aspiring for more responsible posts often secure such promotion in rival concerns.

(b) *For training.*—In addition to the methods in force for the training of the subordinate supervising staff in the railways and ordnance factories, there are a few colleges and a number of industrial and technical schools in the province which undertake this work. Most of these are government institutions. The Engineering College of the Benares Hindu University and the Technological Institute, Cawnpore, are important institutions of "college" status. The former imparts training in mechanical and electrical engineering, and the latter in general applied chemistry and in the technology of oils, sugar and tanning and leather-making. The more important industries in which training is given in the schools are engineering, wood-working, dyeing and bleaching, spinning and weaving, and leather-working. As a rule, there are instructional workshops of varying importance attached to the schools, but training in these has to be supplemented by practical apprenticeship (usually consecutive but sometimes concurrent) in regular commercial factories or workshops.

(ii) *Facilities for the training and promotion of workmen.*—The majority of workmen are drawn from the agricultural classes among which the percentage of literacy is very low. Training of the regular type is therefore usually out of the question. Moreover, family obligations and financial difficulties put a limit on the time and money which the workman can spare for his training.

Opportunities for the training of workmen are practically non-existent in the factories. The available facilities, whether provided by employers, by Government, or by other agencies, will be discussed in some detail in Chapters V and VI. Such facilities as are available for the workmen may be summarised as follows :—

(a) For those already employed in factories or workshops :—(1) The commonest method is personal study and help from colleagues and supervisors.

(2) Next in importance is the system of evening classes or part-time courses. The Government Technical schools at Lucknow, Gorakhpur and Jhansi run such classes, designed primarily for workmen of the local railway workshops. The training commences with general education in reading, writing, and arithmetic, and extends over five or six years, drawing and the rudiments of engineering being taught towards the end. The Government Textile school at Cawnpore has courses for the apprentices and workmen of the local cotton mills.

(3) The railway workshops have another system of training. They enrol lower grade apprentices on rates of pay different from those of the higher grade apprentices intended for foremen's jobs. The low grade apprentices have to attend the workshops like regular workmen and do not get time for attending a day school. They depend on evening classes for such further educational or technical training as is desired.

(b) For those not already employed some of the Government technical and industrial schools provide facilities for the training of boys who wish later on to become skilled workmen. Special artisan courses are available in a number of schools under the Department of Industries for training in smithy, moulding, oil-engine driving, carpentry, spinning and weaving, dyeing and block-printing, manufacture of leather goods, litho-printing and block-making.

(c) There are also many schools—Government and private—which conduct classes for the benefit of boys and young adults intended for some cottage industries, e.g., weaving, carpentry, cabinet-making, metal-working, brassware, embroidery, leather-working, tailoring, etc.

13. (i) (a) *Relations between the managing staff and workmen.*—The difference in the relations between the managing staff and workmen which exist in different concerns and at different industrial centres can, on analysis, be traced to certain well-defined circumstances, the more important amongst which are :—(1) size of the unit, (2) methods of recruitment of the managing staff, (3) nature and extent of welfare work, (4) political conditions, and (5) racial differences.

(1) As a rule relations are satisfactory where the managing staff comes in personal contact with the operatives. In very large concerns such close personal contact becomes almost a physical impossibility. Hence labour disputes are usually confined to big concerns. With the exception of the railway workshops and certain big mills few concerns in the province are of very large dimensions, and broadly speaking, the relations between the managing staff and the rank and file are good.

(2) In cases where the managing staff is recruited by promotion from lower grades, the relations are generally good owing to the previous intimate association with the men. Promoted officers often consider themselves on probation and therefore generally are more tactful and avoid giving offence.

(3) The British India Corporation with their welfare work have been able to avoid serious troubles. Such work not only makes for greater popularity and better understanding but sometimes gives valuable control over the men.

(4) Owing to the rudimentary nature of political consciousness among the working classes, political issues often complicate matters which in themselves are simple, often even trivial. It should be remembered that labour has still to rely mostly on the politically minded classes for leadership and support.

(5) The alleged reasons for a number of strikes, especially in the railway workshops, were assaults by European or Anglo-Indian foremen and officers. In the existing circumstances such issues are complicated by political considerations and create undue trouble. But there are distinct signs of improvement in this respect.

(b) *Relations between subordinate supervising staff and workmen.*—The subordinate supervising staff generally consists of men drawn from lower social strata, among whom favouritism and proneness to unnecessary display of power are not uncommon. Corruption in various forms is a widespread evil.

(iii) *Works committees—their constitution, extent and achievements.*—So far as this Government are aware, there are now no such committees in the province. Some of the constituent members of the Upper India Chamber of Commerce tried them, but abandoned the experiment in 1922, as in their opinion they proved to be failures. The reason assigned for their failure was that in the absence of adequate organization the men did not always consider themselves bound by the undertakings given by their representatives, and thus the committees' work was found to be of little practical value. It is believed that the East Indian Railway has some works committees, but this Government are not acquainted with their work and value.

15. (i) The more common types of contracts are described below :—(a) *Piece work contracts.*—These are common in the weaving sections of cotton mills. It is estimated that 65 per cent. of the weaving is done in this way.

(b) *Labour contracts.*—These are given out for work, involving the employment of unskilled manual labour over which supervision is either difficult or costly. As examples may be mentioned the loading and unloading of consignments, shunting of wagons, removal of cinders and ashes, and stocking of goods in godowns.

(c) The making of *durries*, tents, tailoring and, in some concerns, dyeing are given out on contract to men who engage their own men. The actual work is done in the factory premises. The Government Postal workshops, Aligarh, are also worked on this system.

(d) *Skilled labour contracts for work done at home.*—Work under contracts of this kind is common in the boot and shoe trade of Cawnpore and Agra, the furniture trade of Bareilly, the brassware industries of Benares and Moradabad, the carpet industry of Mirzapur, etc. In fact, for artistic cottage industries this is the most common system, though it has many variants.

(ii) Sub-contracting is common in the *durrie* and tent-making industries, and in the manufacture of military and police equipment. It is very common in the building industry. Since the repeal of the Workmen's Breach of Contract Act, the supply of skilled labour from distant places is usually left to sub-contractors, but a good deal of other work is done under sub-contracts.

In addition to sub-contracts of the type discussed above, there are others in which the contractor gets different processes done by independent sub-contractors. They are common where the processes need special skill not easy to acquire without great practice. Thus, in the postal workshops, Aligarh, a contractor for the supply of locks often gets the casting, machining, engraving and finishing work done by sub-contractors. Similarly in the Agra boot and shoe trade, there are workmen who make only soles and others only the uppers, the stitching being done by the contractor himself.

(iii) To a certain extent this has already been indicated and illustrated. Where the contractors work on the employers' premises adequate control is exercised, both by the chief employers and by the factories inspection staff. But where the contractors take work out, control tends to become lax, and if work is taken home by the actual workers control becomes impossible. It is not unusual for the men and their women and children to work long hours. Considerable difficulty has been experienced in attracting boys of the artisan classes to industrial schools, even by the payment of stipends, as their parents cannot afford to lose their services at home.

(iv) Under the contract system better use is made of time. Hence a good workman should be able to earn more by working as a contractor than as a mere time-wage earner. Contract work also fosters a healthy spirit of independence and self-reliance. Several petty contractors have prospered beyond their expectations. But while the contractor himself is usually a gainer, the system has been known to lead to certain abuses. Sweating is not uncommon. The work being scattered or done in small units is not regulated by the Factories Act. The premises are not always sanitary or hygienic. But the system is well suited to the genius and economic conditions of the province, and is practised on a scale larger than one not familiar with the traditional

methods of work in the province might imagine. Work which in other countries would be done direct by the chief employer is often left to contractors, because the workmen would not put in a reasonable amount of work unless closely supervised by men directly interested in such supervision, or because it is more economical to give it out on contract rather than get it done on the premises. The fact that in spite of the steady growth of large-scale organized industry the system still persists and is vigorous shows that it has an inherent vitality rooted in the genius of the people.

### III.—Housing.

16. (i) Two statements\* are given at the end of this chapter to show the extent (so far as can be ascertained) to which employers provide housing (a) at Cawnpore and (b) in the provinces as a whole for employees in regulated factories.

Out of 338 regulated factories, 83 make some provision for the housing of the workmen and their families. Altogether about 5,400 single-room and 1,045 double-room tenements are provided by employers.

Many factories provide housing for their supervising or managing staff and for menials, but do not provide it for their workmen. Even in a congested industrial centre like Cawnpore, only about a dozen factories provide housing for their workmen. Factories situated at some distance from towns usually must, and do, provide some housing. With these exceptions the McRobertsganj, Allenganj and Juhi settlements of the British India Corporation at Cawnpore are about the only important examples of housing provided by employers for their workmen.

There is on foot an important scheme on behalf of some of the owners of factories in Cawnpore for providing housing for some 20,000 workmen and their families, but it is still under discussion.

As a rule the tea plantations of Dehra Dun provide housing for their permanent labour, most of which lives in the quarters provided. The sugarcane farms of Gorakhpur district draw their labour from the surrounding villages, which in this congested district lie within a few furlongs of each other. As a rule, therefore, these farms do not provide housing.

Workmen engaged on the execution of public works are rarely drawn from a considerable distance. Hence, housing is seldom provided except in the case of large works away from towns and villages. Such workmen as come from a distance make their own arrangements in the adjoining towns or villages. When the work under execution is at a considerable distance and housing is not available, the contractors sometimes supply material to workmen for putting up temporary huts. Wages are usually paid for the period necessary for such construction.

The railways provide quarters along the line for their traffic and engineering staff and for some of their workshop men. It is assumed that the railways will supply the details.

(ii) Except as employers, Government have not provided housing for labour.

The Improvement Trust of Cawnpore has put up some temporary housing and the Improvement Trust of Lucknow has put up a model barrack in the area set apart as an industrial area. Apart from these there is no instance known to this Government of housing provided by Government or a public agency.

(iii) Private landlords supply practically all the housing accommodation which is not provided by the employers themselves. In Cawnpore there are certain localities mainly or largely inhabited by factory operatives and their families. These are called basties or hatas. Housing in them is provided by private enterprise. The usual type is a small mud hut with a room at the back and a room or a verandah in front. The size and height vary. The usual size is 10 ft. by 8 ft. The normal height is 6 ft. to 8 ft. Normally the only outlet for ventilation is the small main door. Even such tenements are often shared by two, three and even four families, and as many as ten persons may be found as inmates. Outside Cawnpore no such concentration of labour exists, though the localities situated near large workshops or factories naturally have a large labour element, and therefore tend to reproduce some of the characteristic features of labour basties.

(iv) In the case of immigrant labour housing provided by workmen themselves is a negligible quantity, and in the main, is confined to the upper strata of the labour population, especially to those workers who have more or less severed their connection with their village. But as a large proportion of labour is recruited locally, workmen engaged in factories in the neighbourhood can often continue to live in their ancestral homes

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\* Not printed. More detailed statements are appended to the Memorandum of the Chief Inspector of Factories.

in their villages. No statistics are available to show the extent to which different classes and types of workmen have either erected houses of their own or continue to occupy their ancestral dwellings.

17. Cawnpore and Lucknow, the two most important industrial cities, have statutory improvement trusts. These bodies are constituted under the United Provinces Town Improvement Act (VIII of 1919). They may lease or compulsorily acquire any land required for the carrying out of an improvement scheme. The provision of accommodation for any class of the inhabitants is one of the matters which may be provided for in an improvement scheme; and an improvement trust can therefore acquire land compulsorily for the building of working-class dwellings. The Cawnpore housing scheme mentioned on the preceding page depends on the compulsory acquisition of the necessary land. In places where there are no improvement trusts it is possible for the municipal or other local board to acquire land compulsorily for a housing scheme by means of the Land Acquisition Act (I of 1894). In the present state of the law, however, compulsion cannot be exercised in favour of a company or private association desiring to start a housing scheme. Up to the present, as far as the Government are aware, no special difficulty has been caused by this fact. In one Cawnpore case twenty years back the municipality acquired the land and then sold it to a concern on condition that they erected houses for their workers on it. No other case has been traced in which a company or association of individuals asked to have land acquired for it for this purpose. There are, as far as the Government are aware, no building societies or other associations which assist workmen to purchase land on which to build themselves houses.

18. A large proportion of the tenements provided by employers or private landlords are single-room, and a much smaller proportion double-room, quarters. Quarters with more than two rooms are rarely found except for the superior classes of workmen. It is difficult to generalize about them, but, broadly speaking, they fall into the following types:—

(1) Single-room huts (8 ft. by 6 ft. to 10 ft. by 8 ft.) found both in and outside Cawnpore.

(2) Single-room (8 ft. by 6 ft.) with a verandah about 4 ft. wide. Average rent Re. 1-2 annas per mensem.

(3) Same but with a small courtyard, about 8 ft. by 6 ft. Average rent Re. 1-8 annas.

(4) Single-room (9½ ft. by 8½ ft.) with a verandah about 4 ft. wide. Average rent Re. 1-8 annas per mensem.

(5) Single-room (10 ft. by 7 ft.) with a verandah about 5 ft. wide. Rent Re. 1-4 annas to Re. 1-10 annas.

(6) Single-room (10 ft. by 12 ft.) with a wider verandah. Rent Rs. 1-12 annas.

(7) Double-room. Each room 12 ft. by 10 ft. A verandah in front. Sometimes also a courtyard. Rent from Rs. 3 to Rs. 4-4 annas and for special types up to Rs. 9-8 annas.

(i) Among these types the general preference of workmen is for the type which has a verandah and a courtyard. The verandah affords shelter in the hot weather and the rains, and being open on at least one side enables the worker to live a partly open-air life. The courtyard ensures privacy without the denial of fresh air and sunshine. The two together help to reproduce village conditions to some extent. But in Cawnpore building land is expensive, and except in the organized settlements, where the rents charged are seldom economic, verandahs and courtyards are rarely found among the tenements with low rents. The quarters provided for workmen employed in outlying factories sometimes have verandahs but rarely courtyards. On the tea plantations a large part of the time is spent in the open air and verandahs and courtyards are unusual.

(ii) The type found in the McRobertsganj settlement of the British India Corporation is generally regarded as the most hygienic. The quarters have an open space in front and masonry drains and open spaces at the back. The standard type room is 12 ft. by 10 ft., with a height averaging 10 ft. The Corporation permit only three adults per room. The Director of Public Health reports—

"In the quarters provided by the British India Corporation there are several grades and they all generally conform to the sanitary type except those which are built back to back."

The most unhygienic type of quarter is the single-room type without a verandah or a courtyard, especially that prevailing in the basties and hatas. To ensure a little privacy the workman and his family often has to keep the small main door or the window shut and even such ventilators as are provided are often blocked up. The Director of Public Health remarks:—

"From the point of view of hygiene and health the type of accommodation provided is sufficient only when workers live singly, or when two or three males club together. When they live with their families and grown-up children, the accommodation is not sufficient."

(iii) *Provision for lighting, conservancy and water supply.*—Except in the organized settlements there are no special arrangements worth mentioning. In the British India Corporation settlements a special conservancy staff is maintained, and external lighting is provided by the Corporation.

19. Generally speaking any accommodation provided by the employers is fully utilized and to a lesser extent that provided by private landlords. The rents, if any, charged for the former are seldom economic in the direct sense, and the demand for such accommodation is therefore in excess of the supply. The "waiting list" for the British India Corporation houses shows that in at least two of their three settlements the accommodation desired by workmen far exceeds that available. Exceptional cases are, however, known in which even in Cawnpore the accommodation provided by employers is not fully utilized. In the outlying factories this is not an unusual phenomenon, when the distance from the neighbouring city, town, or villages is not very great.

20. Rents naturally vary from centre to centre. Some prevailing rates have been mentioned under (18), and in the statements at the end of this chapter. Rents in the basties of Cawnpore are slightly higher, the prevailing limits for single-room tenements being Re. 1-8 annas to Rs. 3 per mensem. Outside Cawnpore wide variation is found. At one end is Moradabad with 8 annas and at the other Naini Tal with Rs. 3 per mensem for single-room tenements. Similarly rents for two-room tenements vary from 12 annas per mensem in Moradabad to as much as Rs. 7 per mensem at Benares and Rs. 9-8 annas at Cawnpore. The normal rent at Cawnpore for such tenements is about Rs. 4 per mensem. Some factories do not charge rent. Six factories at Cawnpore provide rent-free housing. The British India Corporation provides about 300 rent-free quarters. On the tea plantations housing is, as a rule, provided free. The traffic and engineering staff of the railways normally get rent-free housing. It is a noteworthy fact that out of the 83 factories which provide housing, 57 charge no rent, but only a few of these are Cawnpore factories. Nowhere has such a serious and large-hearted effort been made to solve the problem of providing inexpensive but hygienic housing for factory labour as by some of the employers of Cawnpore. Yet nowhere is the problem of housing still so acute as in Cawnpore. If the big scheme mentioned earlier in this chapter matures, it will go a long way to improving matters there.

21. (i) *Subletting.*—In the quarters provided by private landlords both in Cawnpore and elsewhere subletting is generally prevalent and is countenanced by the landlords. Subletting is normally prohibited in the case of housing provided by employers. The prohibition is frequently evaded by asserting that the sub-tenant of a part of the tenement is a relation. Subletting of the whole tenement seldom occurs. In the case of outlying factories, the problem rarely arises.

(ii) *Occupation by tenants in other employment.*—Such occupation is sometimes authorized by the employers owning the tenement, but as a rule higher rent (often double) is charged and the tenancy is made terminable at one month's notice. Outside Cawnpore this question seldom arises.

(iii) *Eviction.*—As regards private houses, eviction rarely takes place except in the case of default in the payment of rent. When housing is provided by employers, the tenant is as a rule bound to vacate when he leaves their service or goes on strike. In the former case there is usually a surrender. In the British India Corporation's settlements eviction consequent on the termination of employment is not always enforced. The Government are not aware of any evictions having occurred for going on strike or holding views unpalatable to the employers. There have, however, been cases of eviction for misconduct, breach of the peace, and rowdiness, etc.

22. The moral effect of housing conditions on workers has not been specially studied. There is, however, no reason to hold that in this respect the province differs from other provinces.

The good effect of the provision by employers of satisfactory housing is acknowledged by some concerns. Their workmen are more contented and more healthy. They therefore do better work and are less prone to strike or to change their employment. The fact that the provision of proper housing is to the advantage of both employers and employed is gradually being realized by employers in Cawnpore and is partly responsible for the increased interest taken by them in this line of welfare work.

#### IV.—Health.

23. In this province industrial hygiene has been receiving systematic attention only from July, 1926. Previous to this there was no special arrangement for inspecting health conditions in the factories other than the general factories inspection

staff. A recommendation by the Conference of Sanitary Commissioners urging the appointment of medical officers of health for special industrial hygiene work was already under this Government's consideration when the Government of India took up the matter in pursuance of the conventions and recommendations of the International Labour Conference. The suggestion of the Washington Conference for the creation of a health service for factory inspection was examined. But it was decided that a whole-time medical inspector was necessary only in Cawnpore, and that other industrial centres could be served by the general medical officers of health. In July, 1926, medical officers of health of municipalities and some districts were appointed additional inspectors of factories within their jurisdiction. Where no medical officers of health are available the civil surgeons in charge of the districts concerned have been charged with the duty of factory inspection. These officers inspect the general sanitation, ventilation, lighting, humidity, temperature, water supply, and sanitary conveniences, and also arrangements for safety, means of escape, hours of work, rest, holidays, and the employment of women and children in the factories. In 1927 model bye-laws for regulating the construction and alteration of factories were approved by Government. These, however, have to be adopted and then enforced by the municipal and district boards before they become operative.

Owing to the strong inclination of the workman to cling to his habits even when his environment has changed and to the migratory nature of a large proportion of industrial labour the reforming efforts of Government, public bodies, local boards and employers are slow to bear fruit, and the incentive to action for the improvement of the conditions under which industrial workers live and work is weakened. The Director of Public Health has urged that wherever possible separate areas should be set apart to serve as settlements for industrial labour similar to the one reserved by the municipality of Lucknow for industrial concerns. The director thinks that if such areas are set apart it will to some extent be possible for employers, private capitalists and the workers themselves (individually or co-operatively) to provide sanitary housing accommodation and for the Department of Public Health to control, both by educative propaganda and by segregation, certain diseases and abuses (e.g., tuberculosis, venereal diseases, alcoholism) which usually follow in the wake of industrial development on factory lines. This proposal has not been examined in detail by this Government.

(i) No statistics relating to the health of industrial workmen are available. The question of requiring factories to supply statistics relating to the health of their workmen was considered, but was dropped as impracticable, as most men live away from the factories, and the management cannot therefore remain in sufficiently close touch. With few exceptions, e.g., the British India Corporation, employers have not kept such statistics. But statistics have been collected for certain parts of the city of Cawnpore where factory operatives and their families form a large proportion of the population. The following table shows (a) the approximate percentage of factory population in the city and in a few of the labour quarters and (b) average mortality in each of them for the period 1921 to 1928 :—

City as a whole.	Gwaltoli.	Khalasi lines.	Raipurwa.	Colonelganj.	British India Corporation's settlements.
(a) 40 per cent.	60 per cent.	90 per cent.	70 per cent.	50 per cent.	90 to 95 per cent.
(b) 46.32.	75.29	65.96	54.43	46.44	34.58

This table shows that leaving out Colonelganj the figures of mortality in the other three labour quarters are higher than the average for the municipality. If it could be assumed that mortality among the other sections of the population living in these was the same as the average for the municipality, the figures of average mortality among the factory population in the four above-mentioned parts of the city would be about 95, 68, 58, and 46.5 per mille respectively; but such an assumption would not be reliable. The British India Corporation's settlements are mainly inhabited by the workmen employed in the Corporation's factories and their dependents. The average mortality in these settlements was only 34.58 per mille, i.e., a little under the average mortality of all towns of the province.

The significance of the above figures will be better appreciated in the light of the following table of average mortality for the last five years for various areas :—

Province as a whole.	Rural areas.	Urban areas.	Municipal areas.	Cawnpore.	Lucknow.	Agra.	Allahabad.
24·83	23·95	37·13	38·51	47·22	39·76	43·19	31·54

*Note.*—Benares has been left out as owing to the sanctity which Hindus attach to that city many of them go to Benares to spend their last days and die, and thus average mortality there is abnormally high.

Tuberculosis is also far more prevalent among the industrial workers (especially females) of Cawnpore. In spite of stricter *parda* for women the average and general mortality from phthisis for the city of Lucknow for the years 1925 to 1928 was 4·55. The corresponding Cawnpore figure was 4·67. The figures of mortality from other respiratory diseases were 1·8 and 3·4 respectively. In the quarters largely inhabited by the factory population of Cawnpore the death-rate due to tuberculosis among females is known to have risen as high as 8·8 per mille.

(ii) The table below shows for the province and for certain industrial towns the average (a) birth-rate and (b) infant mortality (per thousand children born before they reach the age of one year) for the last seven years :—

Province as a whole.	Cawnpore.	Lucknow.	Allahabad.	Benares.	Agra.	Hathras.
(a) 34·98	38·14	47·68	44·19	50·26	61·03	54·71
(b) 172·81	433·43	282·08	244·03	270·17	205·47	269·24

Cawnpore has always been notorious for very high infant mortality. The ratios of general mortality for the city as a whole and for its labour localities indicates that in the latter infant mortality is higher.

(iii) *Working conditions.*—(a) *At work places.*—This Government have not formulated their views on this question and content themselves with quoting certain opinions. The Chief Inspector of Factories finds working conditions in the larger and well-organized factories to be fairly good. He adds that in the smaller concerns there is scope for improvement. The report of Mr. Tom Shaw, M.P., contains the following statement : " Taking the factories from a point of view of height of rooms, space and ventilation, they are at least equal to the factories of Europe." Cawnpore factories are not believed to be behind the factories in other parts of India. It is therefore reasonable to deduce that this statement is substantially applicable to the conditions of work there. On the other hand the Public Health Department does not consider the working conditions to be satisfactory. The Director states that the average cotton mill is not equipped with all the modern devices for the health and comfort of the workers.

(b) *At home.*—Factory operatives seldom work at home. So far as living conditions are concerned, they are unsatisfactory except in such organized settlements as those of the British India Corporation.

As regards cottage industries a large proportion of the work is done by workmen in their own homes. In the case of some of the artistic cottage industries or where costly raw material is used, it is a common practice to employ men for work in small factories. Such factories very rarely use mechanical power. There is no noise and vibration to rack the nerves nor smoke, vapour, or fumes to foul the air. Generally speaking, ventilation and lighting are good, particularly if, as is usually the case, the houses where the work is done are at some distance from the congested parts of the towns. The weaving of silk, cotton, and durries, carpet-making and dyeing and printing require long and well-lighted sheds and rooms. Such work is often done in the open street or lane. Working conditions in other cottage industries are essentially similar.

(iv) The Department of Public Health deputed an officer to make special enquiries about the workers' dietary. Owing to shortness of time he could not collect detailed information for more than about 200 labourers. His conclusions are given in his memorandum.

The conclusions of a social worker who is also an economist were almost identical. Some officers of the Department of Industries observed workmen taking their mid-day meals near factory gates. They found that the usual meal consisted of bread and salt and a vegetable, usually potato. The Department of Public Health has worked out a table of quantity, cost and caloric value of the diet which a man doing hard work should take in the hot and cold weathers, but no attempt has so far been made to ascertain how far the actual dietary of workmen and their families compares with the minimum and the ideal dietaries. It is believed that the actual dietary is particularly deficient in fat and carbohydrates. The minimum monthly cost worked out by that department at the rates then prevailing came to about Rs. 4-8 annas to Rs. 5 per person per mensem. Considering that the size of the average family as ascertained at the census was between four and a half and five persons, and that the size of the working man's family is probably larger, it is not difficult to see that the cost of the dietary as worked out by the Department of Public Health would in many cases be beyond the means of the average working man. The Director of Public Health is definitely of opinion that "diet is frequently insufficient and as a rule ill-balanced." While this Government have not specially considered this question, they believe that his opinion is substantially correct : but they have no definite material which would enable them to institute a comparison between the diet available to factory workers and that available to the working population of the province as a whole.

(v) The Director of Public Health has reported as below :—

"As a rule the general physique of the labourer is poor and this view is shared by the employers. In Messrs. Cooper, Allen's factory and the New Electric Power House only did my Assistant Director come across some men with fine physique and the managers were of opinion that they were well above the general average. The general feeling of some millowners is that labourers keep good health for about ten months after joining, after which they show signs of break down and unless they take rest they are seldom found satisfactory after this period."

On the other hand, it has been found that the average duration of employment is very much longer than ten months. In a certain Cawnpore mill, an average duration of 8.87 years has been reported.

(vi) Owing to the difficulty and expense of taking their families with them, many workmen leave their families behind and either live alone or club together with fellow workers. Hence in the industrial towns the numerical disparity between the sexes is normally the greatest. The following statement shows the number of females per thousand males :—

Province as a whole.	Cawn- pore.	Luck- now.	Allah- abad.	Benares	Agra.	Hath- ras.	Ba- rcilly.	Saharan- pur.	Morad- abad.
909	670	778	778	870	784	770	817	722	844

The proportion of males to females between the ages of fifteen and forty in Cawnpore and Lucknow were 627 and 710 respectively, although Lucknow being an important military station had a large male population of soldiers and camp followers and ranks second only to Cawnpore as regards the number of men employed in factories. It is true that considerable disparity of sex-ratio exists among many other strata of the population of Cawnpore. Men engaged in public, private or domestic service or doing small business on their own tend to leave their womenfolk behind. There is a larger proportion of men visiting the city for business or in search of employment, etc. But it is reasonable to hold that among the working classes the numerical disparity between the sexes is greater than the average for the city as a whole.

As regards the effects of the disparity of sex-ratio, the Director of Public Health says :—

"Beyond giving a general opinion that there is a good deal of venereal disease among the labourers it is difficult to give statistics to prove the statement. From the hospital records it is not possible to find out the details as it is difficult to sort out the labourers from the general population. The hospital statistics supplied by the British



India Corporation for their own colony show that the incidence is not high, but this is probably because the colony is well under supervision and intermixing of families is not so common. The opinion is, however, held that venereal diseases are very prevalent in the bastis because, due to paucity of living quarters, it is common for two families to share a single room and also to shelter adult relations of either sex."

To venereal diseases mentioned by him should be added other evils such as sexual immorality and promiscuity of marital relationships. Though the census statistics fail to furnish reliable information about the number of prostitutes, it is believed to be large. Unseemly squabbles about women and litigation and fighting involving the use of physical force and other crimes are a characteristic feature of life in the *bastis*.

24. (i) Many of the larger and a few of the smaller concerns maintain dispensaries. None maintains a hospital.

Generally speaking industrial concerns which provide settlements or housing for their employees maintain a dispensary in conjunction with their settlement or colony or coolie lines. Some concerns have special arrangements with doctors and with public or private dispensaries for the treatment of their employees. When no special dispensary provided by the employers is available, the men have recourse to the public dispensaries and hospitals. Almost invariably treatment and the supply of medicines are both gratuitous. A few illustrations have been given below, but the list does not pretend to be exhaustive.

The British India Corporation maintain nine dispensaries (including two specially meant for females), four creches and two "baby welcomes"—all in charge of qualified persons. The facilities available in the British India Corporation's settlements are reported to be particularly good. Including the welfare staff four doctors, five visiting nurses, eight matrons, and twelve midwives are employed to look after the health and medical treatment of the men in the settlements and their families. In the year ending June, 1928, 143,000 ordinary and 303 maternity cases were treated by their various institutions. The railways have dispensaries attached to their main workshops and to important junction stations. The Elgin Mills, Cawnpore, the cotton mill at Benares, the spinning mill at Moradabad, the Army clothing factory at Shahjahanpur, the glass factories at Balawali and Naini, the sugar factory at Rosa, some of the sugar factories in Gorakhpur district and some of the tea plantations in Dehra Dun district maintain dispensaries.

(ii) Government have made no special provision for industrial workers as such. But they maintain a number of hospitals and dispensaries, mostly through the local boards to whom grants are made for the purpose. The important ones are staffed by Government servants of the Indian and provincial medical services. At each district headquarter there is a *sadr* hospital. Almost every tahsil headquarter and some important towns which are not administrative headquarters have got dispensaries. The Dufferin Fund, a private organization aided by grants from Government and local bodies, maintains female hospitals at the most important towns. At the close of 1927 the province had in all 583 dispensaries, including 53 maintained by the railways and 134 private but aided by Government. In these hospitals and dispensaries treatment is free, and broadly speaking even medicines are provided free. A table is given below, showing the number of Government, local boards and private (aided and unaided) dispensaries in the chief industrial districts:—

Name of district.	Government.	Local boards.	Private aided.	Private unaided.	Total.
Cawnpore .. ..	—	10	1	—	11
Aligarh .. ..	—	11	2	—	13
Agra .. ..	3	15	—	1	19
Allahabad .. ..	—	14	4	—	18
Lucknow .. ..	2	6	3	—	11
Bareilly .. ..	—	7	3	—	10
Gorakhpur .. ..	—	12	1	—	13
Benares .. ..	—	4	2	—	6
Dehra Dun .. ..	—	10	4	—	14
Moradabad .. ..	—	13	1	—	14
Saharanpur .. ..	1	7	2	—	10

The municipality of Cawnpore has three dispensaries in those parts of the town where industrial labour forms a fair proportion of the total population, viz., Nawabganj, Colonelganj and Gwaltoli.

Besides these dispensaries, the Lady Chelmsford Maternity and Child Welfare League maintains a number of centres for child welfare and the treatment of maternity cases. Like the Dufferin Fund the League is in theory a private organization, but it is mainly financed by grants from Government and is in some measure under official supervision. These centres are more or less confined to the bigger towns.

Besides these Government and the local bodies give grants to some private dispensaries. The local boards have since the introduction of the reforms been maintaining or aiding a number of *ayurvedic* and *unani* dispensaries; grants-in-aid are also sometimes given to homeopathic and other similar dispensaries.

(iii) The female hospitals maintained by the Dufferin Fund and the centres maintained by the Lady Chelmsford Maternity and Child Welfare League have already been mentioned. Besides these, a few hospitals and some dispensaries have been established by philanthropists, missions and private bodies and individuals. Private medical practitioners also maintain a certain number of dispensaries, but they usually charge fees both for treatment and for supplying medicines which elsewhere are generally supplied free. There is no special private hospital or dispensary for workmen as such, but as in the case of Government institutions such private dispensaries and hospitals as supply treatment and medicines free are utilized by workmen and their families.

25. (i) The average workman's attitude towards hospitals and dispensaries and welfare work on modern Western lines is a fairly faithful reflection of that of the lower strata of society, especially of the rural population. They are ignorant and prejudiced against European medicine. They often have more faith in the indigenous systems—sometimes in sheer quackery, though they are prepared to attach more value to European surgical methods than to European curative medicine. There is a very noteworthy prejudice against "indoor" treatment, not only among the patients but also among their relations and friends. Isolation from friends during illness is contrary to the custom of the country. There are at times complaints that inside the hospital the treatment meted out, especially by the lower and menial staff, is discouraging. Corruption too is alleged to be to some extent prevalent. Medicines if not supplied free are costly. The orthodox patient (both Hindu and Muslim) is always suspicious both of the medicines and the diet. The net result is that in the towns the available facilities are fairly freely utilized if they are gratuitous. But in the more backward areas they are not. Owing to the co-existence of other medical systems and a certain amount of quackery and for other reasons the treatment prescribed is not always consistently followed.

But there are distinct signs of a gradual change in this respect. The orthodox sentiment against Western medicines has very perceptibly relaxed. In the towns the practitioners of the indigenous systems have lost a good deal of ground and are still losing it. The further extension of medical facilities to the rural areas which Government have attempted to foster by giving subsidies to medical practitioners who settle down to practice in such areas and to district boards for establishing new dispensaries will gradually help to break down the prejudice still further.

(ii) *By women.*—As a rule they have an even stronger prejudice against Western medicine and medical treatment, and the general objections felt against treatment as indoor patients are felt more strongly by women than by men. Female hospitals maintained by missions are somewhat more popular than others. The Lady Chelmsford League's maternity and child welfare centres are still very few. Women rarely go even to female hospitals for confinement unless there is some complication. Qualified midwives are not utilized to the full extent possible. For general complaints women often prefer to consult elderly women in their neighbourhood and sometimes even quacks. The pressure of domestic and other work prevents systematic and consistent treatment. While the extent to which women operatives utilize the available medical facilities is undoubtedly smaller than in the case of men, the same change as is noticeable among men is coming over women also; only it is a little more gradual. The special female dispensaries for women workers which are a feature of the British India Corporation's settlements at Cawnpore are exceptionally popular.

26. (i) (a) The United Provinces factory rules make provision for the construction, the type and the number of latrines required in proportion to the number of workers. Where a water-borne sewage system exists, the latrines have to be connected with it. Separate latrines have to be provided for women. So far as is known there is only one factory which has latrines on the septic tank system. The use of water-flushed latrines has made little advance, as in most towns the municipal water supply is none too sufficient. Exemptions have been granted from the provisions of Section 13 but have been confined to tea factories, as their labour is used to village condition.

No exemption is granted without a special inquiry to ensure that insanitation and pollution would not result. The Chief Inspector of Factories commented as below on the latrines available in seasonal factories, mostly ginneries :—

“Latrines have been built to comply with the rules and not with a view to their being a convenience. . . . In many cases they are not used at all.”

The general consensus of opinion of officers of the Department of Public Health is that “in the smaller concerns (some of which employ even up to 400 men) arrangements for water supply and conservancy are neither adequate nor satisfactory. In one or two instances this neglect was particularly marked. In the larger concerns the arrangements are satisfactory.” On the other hand, the Chief Inspector of Factories finds sanitary arrangements “generally satisfactory,” though his reports mention warnings occasionally given to managers in order to ensure their being kept in order. The difference of opinion between these officers is not great, and is probably due to a difference in the standards of achievement expected by them. This Government have not examined the question and are unable to formulate their conclusions.

(ii) (b) Generally speaking workmen use the none too numerous municipal public latrines, but numbers use the drains and open spaces in and around the inhabited sites. The condition in which municipal latrines are often kept discourages their use on an extensive scale. In the labour wards of industrial towns sanitary conditions tend to be bad, as the working classes, accustomed to the open spaces, scrub, fields, ravines and banks of tanks and streams in their villages preserve the same habits in an environment lacking such facilities. Conservancy work in such localities is poor. The result is that all round the labour bastis filth and dirt accumulate. In the organized colonies, however, latrines and urinals are provided and a special conservancy staff is maintained to keep them in tolerable order.

27. In Chapter XVII has been described the official staff available for the inspection of the regulated factories and the staff available for inspecting them from the point of view of the workmen's health. The latter staff is none too large, and has not found it possible to do a great deal, e.g., in 1928 it could only inspect thirty factories (in eight districts) out of a total number of 338 working factories.

No such special staff is available for the unorganized and cottage industries and plantations. The “health” problems of labour engaged in them are handled by the staffs of the revenue, police, public health and medical departments as parts of the problems of health of the general population.

There are no boards of health in this province corresponding to those which have been set up at Jharia and Asansol.

28. (i) There are at present no rules in force for controlling temperature in factories. On receiving certain proposals of the Government of India on this subject this Government's views were communicated to the Government of India. They found that public opinion was on the whole against the proposed Bill, and advised that an investigation by experts should precede legislation.

(ii) *Control of humidification in cotton mills—(a) Nature of action taken by local Governments.*—This Government's views on Mr. Maloney's report were communicated to the Government of India in 1924. In 1927 they notified rules requiring cotton mills to provide hygrometers in departments where humidification was used, and kata thermometers for taking cooling power readings and to maintain a register in the prescribed form recording the daily readings. Artificial humidification has under the new rules to cease when the reading of the hygrometer wet bulb exceeds that specified in the schedule for the corresponding dry-bulb reading. The use of live steam for artificial humidification has been prohibited when the dry-bulb temperature of the department exceeds 85°. The Chief Inspector of Factories was instructed to make further inquiries and proposals for the introduction of rules, experimental or otherwise. He carried out an investigation in 1928 in various cotton mills in order to obtain data. His conclusion was that the standards proposed by Mr. Maloney would provide comfortable working conditions, but that owing to the high temperatures obtaining outside during the hot weather in this province it would be necessary to instal expensive central cooling plants, which in the then existing condition of the textile industry he considered financially impracticable. This Government forwarded the Chief Inspector of Factories' report to the Government of India, adding that the views expressed in the report were not necessarily their own.

(b) *Results.*—The rules have brought about an improvement of the working conditions in several mills, especially in the weaving sheds. The Chief Inspector of Factories finds the humidification rules suitable.

29. To provide for disinfection as a precaution against anthrax Section 28 A was added to the Factories Act, but no rules have yet been framed by the Governor-General in Council. Section 19 B prohibits the employment of women and children in certain processes of lead manufacture and regulates it in processes involving the

use of lead compounds. The Chief Inspector of Factories has reported that anthrax has not been heard of as an occupational disease in this province and that no case of lead or arsenic poisoning has come to light. So far as the Government factories in this province are concerned, no case of disease due to the handling of white lead has come to this Government's notice.

30. *Sickness Insurance*.—(i) *Suitability of International Labour Convention*.—A committee appointed by this Government under the chairmanship of the Director of Industries examined this question early in 1929. Its report and this Government's views have been communicated to the Government of India. Owing mainly to the great administrative difficulties and expense involved in the working of any scheme of sickness insurance, this Government did not consider the convention suitable for adoption in this province in the present circumstances. They suggested small-scale experiments in the Government factories, which in this province employ 25 per cent. of the total labour force employed in factories.

(ii) *Possibility of introducing other systems*.—The above committee suggested that "contributory" provident funds would be an easier and more practical and economical solution, as provident funds would enable the workmen concerned to meet financial difficulties due to sickness, accidents, unemployment, "social events" (e.g., marriages, births and deaths in the family or among relatives and friends) and even old age. The Government did not accept this view mainly on the ground that the protection given in cases of sickness would not in ordinary cases be nearly as large as it would be under an insurance scheme. The latter would also have the further advantage of increasing general medical facilities and popularizing medical treatment.

31. *Maternity Benefits*.—(i) In 1924 a special inquiry was made by the Chief Inspector of Factories in connection with Mr. Joshi's Bill. It was then ascertained that the East Indian Railway's oil mills at Manaori had a system of payment to expectant mothers before and after childbirth during absence from work and that one factory used to give a month's full pay and five others (four being British India Corporation concerns) fourteen days' full wages in such cases. Besides these benefits, the Manaori oil mills maintain a hospital including a maternity section, and the British India Corporation provide free medical attendance and medicines for maternity cases in the dispensaries attached to its settlements, and grants as much leave without pay as is necessary. In the year ending June, 1928, a little over three hundred maternity cases were treated in the medical, health and other institutions of the Corporation.

(ii) No provincial legislation has been undertaken in this province.

(iii) Provincial legislation is possible. But the number of women operatives in regulated factories is very small, both absolutely and as a proportion. They are frequently engaged by the day. A large proportion of women operatives are employed in seasonal factories which would find it inconvenient to employ expectant mothers, and would therefore tend to refrain from employing them. This risk would be present, though on a smaller scale, in the case of perennial factories also. Many factories do not employ women at all; of the ninety-two factories from which inquiries were made in 1924, fifty-five, i.e., 60 per cent., were reported to have no women operatives.

On the other hand, the Director of Public Health urges that in the interests both of expectant mothers and of the babies legislation should be undertaken to enable such women to stay away from work for ten days before and twenty days after confinement without losing employment or wages. He says that in spite of three maternity and child welfare centres in Cawnpore the rate of infantile mortality there still continues to be the highest in the province, and he attributes this fact partly to the necessity felt by expectant women workers to remain at work as long and to return to it as early as possible, with resultant injury to their own and to their babies' health. This Government have not decided that the advantages of providing maternity benefits by legislation would outweigh the disadvantages, including the risk of keeping a considerable number of such women out of employment which they might otherwise secure. They have so far considered it expedient to refrain from legislation at the present stage of industrial development in the province.

#### V.—Other Welfare (including Education).

32. In 1926 the Government of India desired information about welfare work to be collected. The Department of Industries made a special inquiry. The facts as then ascertained are substantially true today except that in certain directions welfare work has developed.

(i) *Welfare work by Employers*.—In this field the pride of place for work on organized lines goes to the British India Corporation. They were pioneers, and the example set by them is now to some extent being copied by other large employers of

labour. But they are still far ahead. The Corporation's welfare work pamphlet (1928) starts with the statement that this work is "a frank and practical recognition of our responsibility for the welfare of the many thousands of people who co-operate in the productive activities of this corporation. It represents a settled policy of 25 years' standing . . ." The Corporation have aimed at "providing suitable dwellings and a wholesome atmosphere, promoting happy home life and the social well-being of all," and the fostering of a "healthy and intelligent industrial population" based on the "solid foundations of good-will and the spirit of co-operation." The housing accommodation provided and health work carried on in the British India Corporation settlements have been described in Chapters III and IV. Other welfare work will be described under various heads. Messrs. Begg, Sutherland & Company, another important industrial syndicate, have recently inaugurated an extension of their welfare work. The railways, two of which are managed by the State, have also taken steps to promote the welfare of their employees, but it is assumed that details of the work done will be furnished to the Commission by the railway department. There are a few other isolated instances of factories with some welfare work. But, broadly speaking, and with these honourable exceptions, employers as a class have not risen to their opportunities.

(ii) *By other Agencies.*—Apart from a few schools maintained by Arya Samajist and Christian missionaries and the work done by some missionary bodies for imparting industrial training to some of the lower strata of the population, especially criminal tribes, and the dispensary, the reading room and the newspaper maintained and the lectures, etc., occasionally organized by the Mazdur Sabha, Cawnpore, welfare work done by other agencies for workpeople as such is negligible.

33. The British India Corporation employ a full-time salaried welfare superintendent and a trained staff consisting of four doctors, five nurses, eight matrons, eight compounders, about a dozen midwives, 19 teachers and two sergeant patrols. Including the conservancy establishment the total staff consists of 147 paid whole-time workers. Messrs. Begg, Sutherland & Company have recently engaged the services of a superintendent to organize welfare work for their employees. Some concerns employ teachers and a few have dispensaries in charge of qualified staff.

34. (a) (i) Except for the "tiffin" rooms for the use of European and Anglo-Indian employees of the railways no facilities for taking meals in the factory premises are known to be available. Generally speaking, workmen bring or buy on the spot their own food and take their refreshments wherever they find a little shade.

The British India Corporation have four creches and two "baby welcomes" in charge of trained workers. Two other mills at Cawnpore also provide creches. So far as is known there are no other concerns which provide them.

(ii) Some of the concerns which provide housing accommodation for their workmen provide some facilities for recreation. The open spaces left for the employees' children can be used by employees. The British India Corporation provide fairly extensive facilities for recreation, including playgrounds for Indian and European games, seven covered wrestling-pits, two community halls and rooms for indoor games. Some sports clubs have been organized and these are helped with grants-in-aid. Boys' clubs and scout troops have also been organized. Weekly cinema shows and occasional dramatic and musical entertainments are also held. Messrs. Begg, Sutherland & Company also have undertaken similar work though on a smaller scale. Apart from the railway institutes the railways maintain or subsidize some sports clubs. The East Indian railway has a cinema car and a band for their employees in general.

(iii) *Other Activities*—(1) *Instruction.*—Two reading rooms are kept by the British India Corporation and one by the glass factory at Bahjoi. Lectures are frequently got up in the British India Corporation settlements and are sometimes illustrated with lantern slides.

(2) *Thrift and Saving.*—The British India Corporation have in some cases granted pensions to old workers and widows. They maintain a provident fund, a superannuation fund, three co-operative societies and a home for widows. A cloth shop is also maintained where their employees can purchase cloth at wholesale rates. At times of scarcity foodstuffs have been sold at specially low rates.

In another concern an experiment with a "savings bonus" was tried, but has not been reported to be successful. A few other concerns have co-operative societies. The railways maintain provident funds for their permanent staff. But, so far as is known, there is no other provision elsewhere for thrift or saving.

(3) *Social Organization.*—The credit for the only attempt to build up something like corporate life goes to the British India Corporation. They have set up *sadr panchayats* (committees of five members) in each of their three settlements. All the main communities are represented on these *panchayats*. They try such cases as arise in the settlements and act as advisers and sometimes arbitrators.

(b) In the field of welfare work Government and the local boards have confined themselves to the provision of educational facilities, but with a few important exceptions, no special arrangements have been made for industrial labourers as such. The Department of Industries' system of technical and industrial education is, to a large extent, intended for the benefit of the artisan classes, but these do not take as much advantage of the facilities afforded as they might. In certain local areas primary education has been made compulsory and in such places the children of the working classes have to attend primary schools. But owing to various reasons the working classes do not appreciate the benefits of education for their children, especially when their going to school involves the loss to their families of their earnings, however small. Government used to maintain two factory schools but one was closed last year and the other recently. Two factory schools receive grants-in-aid from Government but the total annual expenditure on this account is only about Rs. 800. The Department of Public Instruction launched a scheme for adult education, in collaboration with the Co-operative Department, but no such school has so far been opened in an area inhabited by an urban industrial population. There are also 334 special schools for adults, about half the number being maintained by local bodies and the rest being private. Two missionary bodies (the Ayra Samaj and the Salvation Army) maintain a few schools for workmen's children.

36. A statement is given at the end of this chapter showing the educational facilities provided in conjunction with factories, so far as could be ascertained by the Chief Inspector of Factories. Only about 15 concerns provide facilities for the education of workmen or their children. Seven of these 15 have schools for the children employed in the factories, three (including two glass factories) have night schools for adults and 14 have schools for employees' children. Among concerns providing educational facilities the foremost place easily goes to the British India Corporation. In 1928 they had four day schools for boys and girls, two night schools and two industrial classes for employees and their families, the average daily attendance in July, 1928, in the various types of schools being 394, 118 and 38 respectively. They had also a training school for dais (midwives), the average daily attendance in July 1928 being 55 (cent. per cent. of enrolment).

In addition to these factory schools, the East Indian and the Great Indian Peninsula railways have schools at important centres (including in the case of the East Indian Railway a hill station) for the children of their European and Anglo-Indian employees. The Bengal and North-Western Railway contribute towards the expense of Anglo-vernacular education for their employees' children; the Rohilkhand and Kumaun Railway also give certain facilities. In this case also it is assumed that details will be furnished to the Commission by the Railway Department.

Apart from various schemes for the training of apprentices and the two industrial classes kept by the British India Corporation in conjunction with their settlements no facilities for industrial education are believed to be provided by employers.

(i) Apart from the British India Corporation's two night schools with an enrolment of 162 and with an average daily attendance of 118 in July, 1928, and from the night schools maintained by the glass factories at Bahjoi and Balawali no other facilities provided by employers for the education of adult workers are known to exist.

(ii) So far as is known there are eight such schools provided for half-time workers in the factories. Three of them are at Cawnpore and the rest at other centres.

(iii) Fourteen industrial concerns have schools attached to them for workmen's children. There used to be two such schools attached to Government of India factories and maintained by this Government, but one was closed in July, 1929. The school attached to the United Mills, Agra, receives a grant-in-aid from Government.

(iv) Remarks showing the extent to which these facilities are used have been given in the statement. Some of these schools are utilized by workmen for the education of their children not employed in the factories concerned. But the experience of the Department of Industries has been that boys of the artisan class do not fully utilize such facilities as are available. The tendency on the part of parents and guardians to exploit children's work in order to supplement the family's earnings is noticeable in the factory schools also. One of them is at present closed and in a majority of them attendance is poor. The schools for half-timers and for adults must on the whole be put down as not very successful.

38. There are in the province about a hundred co-operative societies designed to serve the needs of artisans. It is not known to what extent they attract artisans who work for wages. It is probable that a very large proportion of the members are cottage industrialists rather than wage-earners engaged in cottage industries.

As regards labour employed in the plantations, the Registrar of Co-operative Societies reports that only two co-operative societies have been formed, both in

Dehra Dun district. Even these are not exclusively intended for tea-garden labourers but have a proportion of such labourers as members. One society was in a decaying condition and has recently been reorganized. It has at present only 15 members. The other society has an enrolment of 30, about three-fourths being tea-garden labourers. It is reported to be working satisfactorily.

A few co-operative societies have been organized for the special benefit of factory operatives. There are at present six such societies. As these represent practically all that the co-operative movement has so far been able to achieve among this class of workers, a description of each society has been given below.

(i) *The "Lalimli" Co-operative Society, Cawnpore.*—This is the oldest of all and is the parent of two other recently formed co-operative societies for the benefit of the employees of the British India Corporation. Including skilled and unskilled labourers and some clerical staff it has a total membership of 511. The society only provides cheap and easy credit. No member is advanced a loan exceeding five times the nominal value of the shares held by him. The amount outstanding against members is nearly Rs. 33,000. Its present condition is believed to be on the whole satisfactory.

(ii) and (iii) *Kakomi and Hazari Co-operative Societies.*—These were recently started to serve the needs of the employees of two other constituent members of the British India Corporation. To a certain extent they have drawn their membership from the older parent society, the "Lalimli." These societies also confine themselves to the provision of credit.

(iv) *The Harness and Saddlery Factory Co-operative Society.*—Membership is open to all employees, including clerks of the Government Harness and Saddlery Factory, Cawnpore. Enrolment is about 700. The total amount outstanding against members is about Rs. 36,000. In this case also the upper limit for loans to be advanced to members is five times the nominal value of shares held by the borrower. This society not only supplies credit but also runs a cloth store, where sales are made on credit as well as for cash. Its condition has been reported to be fairly satisfactory.

(v) *Bahjoi Glass-workers' Co-operative Society.*—The members of this society are all workmen employed in the factory and residing in the adjoining villages. Part of the working capital consists of deposits made by the owners and some employees of the factory. The society confines itself to the provision of credit.

(vi) *Mazdur Sabha Co-operative Society, Cawnpore.*—This society is a branch of the Mazdur Sabha. The members are all employees in the various industrial concerns of Cawnpore and number 115. It is purely a credit society. The amount outstanding against members is about Rs. 3,000. This society is believed not to be in a prosperous condition owing to various reasons.

There is also a society for Christian clerks employed in various Cawnpore firms. The enrolment is 33. But it can hardly be called a co-operative society for industrial labour.

Considering the number of employees in the various regulated factories of Cawnpore the aggregate membership of the various co-operative societies in that city is a small fraction. Outside Cawnpore there is hardly any co-operative movement to speak of among industrial labourers. The difficulties in their case are greater than in the case of agriculturists' societies. It can therefore be said that while the co-operative movement has, to a small extent, spread in Cawnpore, it has failed to make an effective appeal elsewhere, and even in Cawnpore its condition is by no means flourishing.

Statement of educational facilities provided by employers.

Names of factories.	Place.	Whether educational facilities are provided for—			The extent to which these facilities are used.	Remarks.
		Adult workers.	Children working in the factory.	Workmen's children.		
1. *The Agra United Mills, Limited	Agra	No.	Yes	Yes	—	*The school at present is closed and government grant is awaited.
2. Tribeni Desi Sugar Works	Naini	No	Children not employed.	Yes	—	
3. Indian Bobbin Compnay..	Clutterbuckganj.	No.	Do.	Yes	—	
4. Rosin and Turpentine Factory, Clutterbuckganj.	Do.	No	Do.	Yes	—	
5. East Indian Railway Electric Power House.	Moghalsarai	No.	Do.	Yes	A very limited number take advantage of the school.	
6. Ganga Glass Works	Balawali	A night class.	A night class	A day school	These are availed of to the full only by workmen's children; otherwise the response is poor.	
7. Elgin Mills Company, Limited	Cawnpore	No	Yes	Yes	Well attended.	
8. British India Corporation, Limited	Do.	Yes	Yes	Yes	Very largely used and appreciated by their employees and their families.	



Statement of educational facilities provided by employers.—Continued.

Names of factories.	Place.	Whether educational facilities are provided for—			The extent to which these facilities are used.	Remarks.
		Adult Workers.	Children working in the factory.	Workmen's children.		
9. Harness and Saddlery Factory ..	Cawnpore ..	No ..	Yes ..	Yes ..	Full advantage of the facilities provided is taken by the workers. Attendance for children working in the factory is compulsory.	
10. Forest Research Institute ..	Dehra Dun ..	No. ..	No ..	Yes ..	Take full advantage of the educational opportunities afforded.	
11. Partabpur Sugar Factory ..	Mairwa ..	No ..	Children not employed.	Yes ..	To a great extent.	
12. United Provinces Glass Works, Limited.	Bahjoi ..	A night school.	A night school	—	Not well utilized by workmen.	
13. Moradabad Spinning and Weaving Mills Company, Limited.	Moradabad ..	No ..	—	Yes ..	A great number of workmen's children attend.	
14. Rosa Sugar Works and Distillery ..	Rosa ..	No ..	Yes ..	Yes ..	About 20 children attend daily.	
15. Army Clothing Factory ..	Shahjahanpur ..	No ..	Yes ..	Yes ..	The total number on the roll is 71. But it is not attended by children employed in the factory.	
16. Great Indian Peninsula Railway..	Jhansi ..	Details not known				

## VI.—Education.

40. *Facilities for general education in industrial areas.*—(i) *Of children not in employment.*—Some of these facilities have been described in (32) (ii), (34) (b) and (36). Apart from them industrial areas enjoy only such facilities as are provided by the local body entrusted with the local administration and by the authorities in charge of Anglo-vernacular education. Under an Act of 1919 municipalities, and under a similar (but not identical) Act of 1926 district boards, are empowered to introduce compulsion in order to bring all children between the ages of six and eleven years under primary instruction in the vernacular. At present compulsion is in force in the whole or specified parts of thirty-five municipalities and in specified parts of twenty-four district board areas. Among such municipalities are the industrially important ones of Cawnpore, Lucknow, Benares, Agra, Bareilly, Meerut, Moradabad, Aligarh and Firozabad. The municipality of Cawnpore was the first in the field with its scheme for compulsory free primary education. In selected parts of that municipality compulsion has been in force since 1922. The earlier enactment of the legislation enabling municipalities to introduce compulsion and the fact that factories and cottage industries are chiefly located in the urban areas have combined to provide industrial areas with more extensive educational facilities than are enjoyed by the rural population. It has not however been possible to work out statistical information showing the extent of these facilities or the extent to which they are utilized. Rather less than one-half of the boys in the province between the ages of six and eleven are at present in the vernacular schools.

(ii) *Of children employed in factories.*—These have been described in (34) (b) and in (36) and in the statement at the end of chapter V. The 1919 and 1926 Acts contain provisions for preventing the utilization, whether for remuneration or otherwise, of the services of a child whose parents is required to cause him to attend a recognized primary school. The local board's special night schools for adults which are mentioned in (34) (b) can be attended by boys of twelve years and upwards. An extension of such facilities in the municipalities is under Government's consideration. The working of these schools has been reported to be inefficient, though most inspectors of schools agree that they have great potentialities for good. The night schools for adults recently established by co-operative education societies have been more favourably reported upon. But this experiment is only about a year old and has been undertaken in the rural areas. The number of such schools is still very small. From the point of view of children and young adults employed in the factories the experiment is unimportant.

41. *Facilities for industrial and vocational training.*—These have been described in some detail in (12) and in appendix II\*, and also in (34) (b) and in (36).

## VII.—Safety.

43. *Existing regulations.*—(i) *In factories.*—These are laid down in chapter III of the Indian Factories Act and in the rules framed by this Government thereunder. The rules will be found on pages 8 to 12 (rules 34 to 52) under the heads—Fencing and guarding of machinery, special rules for fencing in textile factories, special rules for fencing in ginning factories, and rules for the protection of persons attending to machinery and boilers.

All boilers in use in the province are inspected once a year by the staff of the Chief Inspector of Factories and Boilers to determine the safe working pressure. When first registered they are hydraulically and steam tested, and such tests are periodically repeated. A special note on boilers inspection has been appended to chapter XVII (Administration).

The use of electrical energy in factories and elsewhere is governed by the Indian Electricity Act and the rules thereunder.

(ii) *Mines, railways and docks.*—These will be dealt with by the Central Government departments concerned with them and need not be referred to in this memorandum.

44. *Incidence of accidents.*—(i) *In factories (including railway workshops).*—A statement\* at the end of this chapter gives the number of accidents in regulated factories grouped by industries for five years. It will be seen that it is highest in the railway workshops which account for about 80 per cent. of the total. But it should be pointed out that railway workshops are among the best guarded and fenced factories in the province, and that the incidence of fatal accidents in them is lower than in other factories. To some extent the high incidence of accidents in them is only apparent, and is due to liberal treatment in regard to leave of absence on account of trivial accidents. In 1928 the Great Indian Peninsula Railway workshops at Jhansi accounted for nearly 53 per cent. of the total number of accidents in the province; these workshops are as well fenced and guarded as any in the province, and the bulk of the accidents were unconnected with the machinery.

\* Not printed.

Next after the railway workshops come textile and engineering factories. In the remaining factories the incidence is negligible. Accidents to operatives from boilers are practically speaking unknown.

The following two statements illustrate the above points :—

(a) *Incidence of accidents per hundred employees in regulated factories.*

Incidence of accidents.	1924.	1925.	1926.	1927.	1928.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
(1) Railway workshops	4·68	7·36	7·05	5·26	*6·95
(2) Textile .. ..	0·37	0·42	0·45	0·29	0·4
(3) Engineering (excluding railway workshops).	0·74	1·42	1·32	1·14	0·73
(4) All the rest ..	0·20	0·34	0·34	0·35	0·48
(5) Average for all industries.	1·17	1·77	1·94	1·39	1·86

\* If the figures for railways are split up, the figure for the Great Indian Peninsula Railway is 17·92 per cent. and for others 3·2 per cent.

(b) *Total number of accidents—fatal, serious and minor.*

	1924.			1925.			1926.			1927.			1928.		
—	Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.
(1) Railway workshops.	43	654	—	62	1,080	3	87	1,271	4	44	932	4	102	1,193	
(2) Other factories.	12	44	153	20	69	170	9	54	213	10	37	199	22	76	214
Total ..	12	87	807	20	131	1,250	12	141	1,484	14	81	1,131	26	178	1,407

The incidence of accidents has (with the exception of 1927) been rising since 1925, the exact figures for 1924 to 1928 being 1·17, 1·77, 1·94, 1·39 and 1·86. This is probably due to the fact that the growth of the operative's mechanical sense and his education have not kept pace with the increasing complexity of the plant and the processes. On the other hand, the guarding and fencing of machinery have shown steady improvement for several years past and it is difficult to lay the responsibility for the enhanced incidence solely on the abovementioned reason.

(iii) *In mines, railways and docks.*—This will be dealt with by the Central Government departments.

45. *Causes.*—A classification of accidents for the last five years has been given at the end of this chapter, and shows that the largest proportion were those due to the use of hand-tools, and after that those caused by falling weights. Those due to workmen falling and to the handling of miscellaneous machinery come next in the order of numerical importance. But accidents due to the handling of machinery as a whole and especially of machine tools are fewer than might be expected, and in 1928 accounted for only about 20 per cent. of the number of accidents.

The causes of accidents are numerous. The average Indian workman has little idea of the dangers attendant on machinery. His training is negligible. His environment is unmechanical. His traditional dress sometimes exposes him to risk. He often takes shortcuts or undue risks because he does not realize their danger. Only a small proportion of workmen in a factory are literate and can therefore understand, even if they care to, the meaning of safety instructions and posters. Instances have come to the factory inspection staff's notice in which guards were removed for the cleaning or repairing of machinery but were not replaced, with the result that the repairers or their co-workers were injured. There is also in the average worker a certain degree of carelessness and heedlessness. Thus, of the five men killed as a

result of accidents due to careless replacing of belting, four were experienced beltmen ; familiarity with the danger bred in them a contempt for it, and they took undue risks. Unauthorized handling of machines often takes place. Thus an oilman attempted to replace belting, though this was no part of his duty, and got entangled and killed. Lighting is on the whole as good as might be wished, and fencing and guarding are reasonably adequate and are gradually improving.

46. *Accident prevention.*—The provisions in the Act and the rules have already been described. These are enforced within the limits permitted by the meagre staff available for the inspection of factories. Since the introduction of the Workmen's Compensation Act the employers' interest in the provision of guards and fencing has also been stimulated and they have generally been found willing to comply with such orders for the efficient guarding and fencing of machinery as are issued by the factories inspecting staff. The cleaning of machinery in motion by women and children was prohibited by the Amending Act of March, 1926, and can under the same Act be prohibited in the case of men ; but in this province such prohibition applies only to the cleaning of machines in motion with rags or cotton waste held in the hand.

In 1926-27 "safety-first" posters were put up in most of the railway workshops and the number of accidents went down from 1,361 in 1926 to 980 in 1927. But the novelty soon wore out and in 1928 the men took little notice of the posters. The number of accidents in 1928 rose to 1,299. This figure is very little lower than that of 1926. It only remains to add that the posters have not been changed since they were first put up.

In factories other than railway workshops no "safety-first" posters have been adopted. But notices in English, Hindi and Urdu prohibiting the cleaning of machinery in motion have for a number of years back been put up in many of the larger concerns. Notices of caution against electric shocks have also been put up where electrical machinery is in use.

Apart from these posters and notices and the advice offered by the factories inspection staff, no specific "safety" propaganda has been undertaken. No lectures or demonstrations or cinema shows or other forms of instruction and training of workmen in the avoidance of accidents have, so far as this Government are aware, been undertaken by the employers or by associations of the employees or by other bodies or persons.

47. *Accidents in non-regulated establishments.*—No information is available.

48. *First-aid and medical relief.*—Under rule 77 all factories employing 500 or more persons have to provide first-aid appliances and sterilized dressings and to keep them readily available during working hours. Many factories which are not bound by this rule also provide these facilities, but the exact number is not known.

Most of the larger factories maintain dispensaries and employ a resident or visiting medical man. The exact number of such factories is not known.

49. The following tables show the frequency of factory inspections, the majority being by the Chief Inspector of Factories himself :—

—	1924.	1925.	1926.	1927.	1928.
Number of working factories ..	257	276	313	332	358
Number of inspections by—					
(i) Chief Inspector of Factories ..	} 306	346 {	410	288	337
(ii) His staff .. ..			150	115	183
(iii) Others .. ..			76	99	92
Total .. ..	306	382	636	502	612
Number of factories inspected—					
(i) Once .. ..	179	155	120	179	180
(ii) Twice .. ..	35	54	65	74	100
(iii) Thrice .. ..	5	17	46	25	23
(iv) More than three times ..	5	13	49	13	20
Number uninspected .. ..	33	37	33	41	15

\* No reports received.

Considering the meagre staff available for the inspection of factories, and the increasing pressure of administration work, the frequency of inspections is in this Government's opinion as good as could reasonably be expected. Where the staff is so small and factories so scattered the difficulty of making a surprise inspection is naturally great. In the matter of stringency of inspection and enforcement of the regulations, the work of the staff has been satisfactory.

50. The effects of hours of work, health, light and other working conditions on safety can be deduced *à priori*. But no investigation has been undertaken to ascertain the extent of agreement between such *à priori* conclusions and the actual facts.

### Classification of Accidents.

Nature of accident.	Total number of accidents.				
	*1924.	*1925.	1926.	1927.	1928.
<i>Textiles.</i>					
Scutchers .. .. .	—	—	4	—	7
Carding .. .. .	—	—	14	21	16
Spinning .. .. .	—	—	5	2	9
Weaving .. .. .	—	—	6	2	11
Cleaning machinery in motion .. ..	—	—	16	13	19
Miscellaneous .. .. .	—	—	71	42	40
Total .. .. .	96	104	116	80	102
<i>All other factories.</i>					
Machine tools .. .. .	—	—	60	44	61
Rolling stock on lines .. .. .	—	—	12	5	14
Mill gearing, shafting, etc. .. .. .	—	—	5	8	2
Belts .. .. .	—	—	12	9	15
Miscellaneous machinery .. .. .	—	—	94	71	145
Cranes, hoists and winches .. .. .	—	—	18	12	12
Falling weights .. .. .	—	—	293	189	289
Persons falling .. .. .	—	—	98	59	98
Tools in use .. .. .	—	—	473	354	386
Drowning .. .. .	—	—	1	—	1
Molten metal .. .. .	—	—	1	10	12
Scalds .. .. .	—	—	12	17	20
Electricity .. .. .	—	—	5	7	7
Burns .. .. .	—	—	91	77	99
Miscellaneous .. .. .	—	—	346	284	348
Total .. .. .	810	1,297	1,521	1,146	1,509
Grand total .. .. .	906	1,401	1,637	1,226	1,611
Accidents per hundred persons employed	1.17	1.77	1.94	1.39	1.86

\* There was no classification in 1924 and 1925. Hence only totals are given.

### VIII.—Workmen's Compensation.

51. *Workmen's Compensation Act.*—(i) The administration of the Act has given rise to little difficulty and the apprehensions about its smooth working which were felt at the time of its passing have proved unfounded. Its use is extending. In this province the number of compensation cases and the amounts paid as compensation have both been rising ever since the law came into force. The number of accidents as reported in the Chief Inspector of Factories' report and their incidence have both, with the exception of 1927, been rising (see statement). It is also remarkable that few cases have been dismissed, and that the proportion of contested cases is small.

(ii) Statistics are not collected regarding all cases of compensation paid under the Act, but only for the more important classes of workers, i.e., those in factories, railways, tramways, mines and docks.

The ratio of the number of claims for compensation including settlements out of court to the number of accidents is not high and seems to have become comparatively stationary. In regulated factories alone the number of fatal and serious accidents in 1928 was 204. A certain proportion of accidents classed as minor, but involving a disablement of over ten days, should be added to this figure, but the exact number cannot be ascertained. Yet the total number of claims including applications for the registration of settlements out of court in respect of accidents for which compensation could be claimed—these include accidents in establishments other than the regulated factories—was only 113. In a certain number of cases, mostly minor accidents, compensation is paid by the employers without any reference to a Commissioner. Complete statistics of such cases are not available. Hence the proportion of actual claims to possible ones cannot be precisely stated, but from the figures cited above it is reasonable to assume that in the case of a considerable proportion of accidents compensation though claimable is for various reasons not claimed. The great majority of workmen, even skilled ones, are illiterate, ignorant and unorganized. The existence of the law is often not known to the victim of the accidents or their dependants. There are few organized unions manned by a well-informed staff who can take up their cause and fight it out if need be. Lack of means handicaps the filing of claims. Inertia and a tendency to fatalism stand in the way of claims being advanced. When injured, the workman often has to or prefers to go back to his village for treatment, and even if he knows he can claim compensation he often forgets all about it, or on recovery prefers to remain quiet. Hence, on the whole, the workmen in many areas have been slow to realize and slower still to utilize the benefits which the law confers on them. In respect of minor disablements in particular, the number of claims made is still very far short of possible claims. But the Act is steadily getting more and more widely known and more and more utilized.

(iii) The total amounts paid as compensation—roughly Rs. 10,000, Rs. 20,400, Rs. 41,000 and Rs. 46,000 in 1925, 1926, 1927 and 1928, respectively—are a trifle compared with the aggregate value of the turnovers of industrial concerns affected by the Compensation Act. The number of claims made is not large. The proportion of contested cases, i.e., the extent of real litigation, has been insignificant. Hence in spite of the apprehensions felt by employers when the Bill was on the anvil, the actual adverse effect on industry is negligible.

On the other hand, the Act has appreciably helped to introduce more effective fencing and guarding of machinery, better lighting, "safety first" propaganda and the provision of first aid and medical relief.

On the whole, therefore, the Act has not only enabled compensation to be claimed with ease, cheapness and expedition, but has indirectly helped to humanize the conditions of work, without imposing an appreciable burden on industry. No responsible assertion to the contrary has so far come to this Government's notice. Even when the Board of Industries, whose non-official members represent mostly the employers' interests, resisted the proposal to extend the scope of the Act to other occupations, it was not asserted that the Act had handicapped industry.

(iv) *Availability and use of insurance facilities and value from workers' point of view.*—Such facilities are available. At Cawnpore there is an agency of an insurance company specializing in manufacturers' and employers' liability. Some other insurance companies and associations also undertake such business. There is no "mutual" assurance association such as has been set up by the Bombay Millowners' Association.

The extent to which the available insurance facilities are utilized is still small. Only about 12 per cent. of the regulated factories (44 out of 373) take out insurance. These factories employ 25·6 per cent. of the total number of employees in regulated factories. Cawnpore is naturally a little more advanced in this respect. Eighteen out of its sixty-four factories (employing 55 per cent. of the factory labour) protect themselves by such insurance. The figures are however, variable from year to year.

52. On a reference by the Government of India the desirability of extending the Act to organized but not hazardous industries and to the manufacture of explosives, including country gunpowder was considered by this Government. They advised caution so as not to handicap industry. They suggested the extension of the Act to certain occupations.

*Possibility of providing against the insolvency of employers.*—The Government recently considered the matter and informed the Government of India that in their opinion the province was not sufficiently advanced to warrant the introduction of compulsory insurance.

53. *Suitability of provisions relating to—(i) Scales of compensation, (ii) Conditions governing its grant and (v) Certain other matters.*—The Government have recently submitted their detailed views on all these questions to the Government of India in answer to the enquiry mentioned above.

(iii) *Industrial diseases*—The provision in the law about diseases in respect of which compensation can be claimed is elastic, and the list can be added to by the Government of India. As a result of a question in the Council, the liability of workmen engaged in the blowing of glass in glass factories to tuberculosis was investigated. The incidence of tuberculosis in such factories was not found to be heavy, and no action was therefore recommended. This Government have no additions to suggest to the existing list and no alteration of the procedure and the *onus probandi*.

(iv) *Machinery of administration.*—This province has no special commissioner for the administration of this Act. District magistrates are *ex-officio* commissioners. The compilation of the annual report is done by the Director of Industries.

*Statement showing details about workmen's compensation.*

Year.	Total daily average number of persons employed in regulated factories.	Accidents.				Incidence of accidents as a percentage of column 2.	Proceedings before Commissioners for Workmen's Compensation Act.				Registration of agreements.
		Fatal.	Serious.	Minor.	Total.		New cases filed including those received by transfer.	Non-con- tested.	Dismissed.	Compensation awarded.	
1	2	3	4	5	6	7	8	9	10	11	12
1922 ..	72,545	6	95	750	851	1.03	—	—	—	—	—
1923 ..	73,906	8	108	598	714	0.9	—	—	—	—	—
1924 ..	77,202	12	87	807	906	1.2	—	—	—	—	—
1925 ..	78,942	20	131	1,250	1,401	1.8	15	13	1	10,003	13
1926 ..	85,517	12	141	1,484	1,637	1.9	44	40	1	20,428	12
1927 ..	88,319	14	81	1,131	1,226	1.4	85	72	1	41,288	11
1928 ..	86,531	26	178	1,407	1,611	1.9	103	86	1	46,267	10

## IX.—Hours.

### A.—Factories.

55. (i) The upper limit is fixed by the Factories Act at 60 per week and eleven per day. The normal working hours as determined by custom or agreement vary in different industries. Government factories usually work seven to eight and a half hours per day, with a half holiday on Saturday. "Continuous process" factories work three shifts of eight hours each for all the seven days of the week. Textile, oil, engineering and miscellaneous factories work a ten-hour day for six days a week. The following table shows the percentages of factories according to their weekly working periods during the last three years :—

Year.	Not more than 48 hours per week.	Not more than 54 hours per week.	Above 54 hours per week.
1926 .. ..	16.89 per cent	6.49 per cent.	76.62 per cent.
1927 .. ..	14.15 "	8.31 "	77.54 "
1928 .. ..	16.87 "	6.62 "	76.51 "

A statement has been given at the end of this chapter showing by districts the percentage of factories which worked more than 54 hours per week in 1928. The remarks column shows the predominant factory industry of the district and thus indicates the industries in which the weekly working period exceeds fifty-four hours.

(ii) Overtime is generally understood to mean work of over eleven hours per day or sixty per week. This can only be permitted as a special exemption under section 30 of the Act. Extra remuneration at  $1\frac{1}{4}$  the usual proportionate rate must, as laid down by the Act, be paid for all overtime work.

But actual working periods do not always correspond with the periods nominally fixed by the factories. To give an instance, printing presses fix their working period at ten hours per day but seldom work more than eight. If the actual working time

exceeds eight, the men receive extra payment, this being a mutual trade arrangement but not compulsory under the Act. The ten hours' working day is fixed in order to avoid the necessity of having to notify the change in working hours when there is pressure of work.

(iii) *Spreadover*.—So far as can be ascertained this phenomenon is confined to running repair sheds on the railway, water-works and glass factories using the Japanese type of furnace. No statistical information is available to show its extent.

56. The factories Act regulates the period of work for the workmen, but not for the plant which can go on working without a break. But custom has fixed certain working periods. Government factories and railway workshops work  $5\frac{1}{2}$  days per week, Saturday being taken as a half holiday. "Continuous process" factories work seven days a week. Other factories generally work six days per week.

57. (i) No information is available to show how the average workman has utilized the longer leisure hours given him by the Factories Act. A small proportion of unskilled labour has utilized it in order to make a little more money, but no statistics are available. Opportunities for intellectual improvement and amenities for enjoyment are still few, though gradually increasing.

On the other hand, supervision over labour has had to be stricter, and there is less loitering than before. The piece-worker's efficiency and application have to a slight extent improved, as he has to apply himself more closely without impairing the quality of his work in order to earn the same wage by a day's work as before.

(ii) Prior to the limitation by the Factories (Amendment) Act of 1922 of the maximum weekly working period to sixty hours, only textile factories were limited to twelve hours per day, or seventy-two per week, but other factories were not restricted at all. Hence comparison is only possible in the case of textile factories, and even in respect of them a comparison is not always possible owing to the variation of the other factors (*e.g.*, the efficiency of machines and of men and the class of goods made). But the following figures, relating to the waste mule spinning department of one of the Cawnpore mills in which machinery was not changed during the years 1921 to 1925, are of some interest :—

Year	1921	1922	1923	1924	1925
Production (in 1,000 lbs.)	68.2	67.9	53.5	57.3	56.9

(The management say that the number of men employed remained practically constant.) These figures indicate that the drop in production was a little more than proportionate to the reduction of the working period.

On the other hand, the Chief Inspector of Factories, impression of employers' opinion in general is that the sixty hours' restriction has not affected production to any considerable extent.

This Government have not investigated this question, and are unable to say whether, and to what extent, production has been affected by the sixty hours' restriction.

58. This Government are unable to say what the effect of the daily limit has been. It is likely to be similar to the effect of the weekly restriction.

59. In this Government's opinion a further reduction of working hours is not now possible without curtailing production, and incidentally the earnings of the piece-worker, who in the textile mills forms a very considerable proportion of the employees. There is also the risk of labour troubles to consider, as the piece-workers would demand higher rates and the time-workers would resent a reduction of wages which would probably have to be adopted by the employers if production is curtailed as a result of a further reduction of the maxima.

60. In factories working ten hours per day, a mid-day interval of one hour is given, usually after the first five hours of continuous work. Sometimes, however, it is given after the first six hours, this being the maximum permitted by the Act for continuous work. Other divisions of the total working time are in vogue, but they are in the nature of exceptions. Sometimes even the same factory changes its division of the working time from five and five to six and four or to other intermediate proportions according to the season of the year. As an alternative, the law provides for two intervals of half an hour each in place of one interval of one hour. Although a demand on the part of workmen for two such intervals in place of one is not unknown, the general preference is for the full one hour's interval. From the point of view of the mid-day meal time, the provisions of the law appear to this Government to be satisfactory. As regards their suitability from the point of view of fatigue, no investigation into this difficult technical subject has so far been undertaken.



61. Section 22 prescribes Sunday or a substituted day within three days of Sunday as a compulsory day of rest; thus ten days is the limit of continuous work. In practice the day of rest usually observed is Sunday. But when a public holiday is coming off during a week, it is usual to utilize that holiday as a substituted holiday for a Sunday. In this Government's opinion the law on the subject is suitable.

62. Exemptions under sections 30(1) are granted by the local Government for certain classes of work, e.g., in "continuous process" factories, and in glass, paper, rice, tea, dyeing and bleaching, opium, dairy, cotton-ginning and similar factories. In each case conditions are prescribed with regard to the compulsory periods of rest and holidays. In the case of these exemptions the period of validity is not limited. But the exemptions are examined from time to time and are curtailed or cancelled when necessary. All exemptions issued in 1924 and 1926 were completely overhauled in 1928, and several of them were curtailed and a few were entirely cancelled.

Exemptions under section 30(2) are granted for limited periods. They are expressly intended to enable the factories to cope with an exceptional press of work. They used to be somewhat freely given, but have now been considerably restricted as will appear from the following statement :—

Year	1924	1925	1926	1927	1928
Number of exemptions granted	17	11	3	4	1

To give examples, an exemption was granted to an engineering workshop in order to enable it to fabricate in time the material needed for a railway bridge. Similarly, an exemption was granted to a paper mill in order to enable it to comply with the terms of its contract to supply paper to the Government.

#### B.—Mines.

*General.*—The greater part of this province consists of an alluvial plain totally lacking in minerals of any sort. The hill districts are undeveloped, and in many parts are even inaccessible. A few districts lying south of the Jumna contain some of the outspurs of the central Indian or Vindhyan hill-system. The few regulated mines that exist in the province are all confined to this area, i.e., to the districts of Agra and Jhansi and the southern parts of the districts of Mirzapur, Hamirpur and Banda. The regulated mines number thirty-nine. They are concerned with stone (unspecified) steatite, sandstone, gravel and fireclay. There are a number of smaller mines not under the Act; these, too, yield various types of stone, slate, ballast, stone metal for roadmaking, gravel, *kankar* and sand. The only valuable mineral found though on a negligible scale is gold; in 1928 gold-washing gave employment to only fifteen persons. Mining gives employment to only about 6,000 persons. In 1928, 2,108 persons were engaged in regulated mines and 3,977 in unregulated mines. In the regulated mines, women workers were about one-third of the total and children only about  $5\frac{1}{2}$  per cent. In the unregulated mines, the percentages of men, women and children were eighty-one, eleven and eight respectively.

63 to 72. *Hours per day and per week, etc.*—As regards the unregulated mines, no investigation has been undertaken, and no information on this subject is available. It is, however, believed that they do not exceed eight. For regulated mines, the Chief Inspector of Mines will, it is expected, report on these matters.

#### D.—Other Establishments.

78 and 79. *Hours per day and per week. Days per week*—(a) *Plantations.*—No regular investigation has been undertaken. But a special enquiry was made into the conditions of work on the tea gardens of Dehra Dun, the tea gardens and fruit orchards of Kumaun and the sugar plantations of Gorakhpur in connection with the preparation of this memorandum. It has been reported that the normal working period at Dehra Dun is about eight hours, but the labourer has to be "on call" for nine hours (6.30 a.m. to 5.30 p.m., with two hours' interval between noon and 2 p.m.). Normally Sunday is taken as a holiday, but when there is pressure of work it goes on on Sundays also. In such cases they pay extra for such work, though new men are ordinarily not engaged. The normal weekly period of work is forty-eight to fifty-four hours, but it sometimes goes up to sixty-three. Tea gardens work is to some extent seasonal. In Kumaun the daily working period is nine hours per day and a few holidays, mostly religious festival days, are observed. On the big private sugarcane farms in Gorakhpur district, the labourer normally works seven hours a day for about three hundred days in the year. The normal weekly period of work varies between forty-eight and fifty-six. As at Dehra Dun, Sundays are observed as holidays on some farms.

It will thus be seen that the normal daily working period varies between seven and nine, eight being a fair average. Overtime work is exceptional except when pressure of work necessitates the non-observance of the customary holidays. For such overtime extra payment is normally made. It should, however, be noted that there is considerable variety in the system followed not only at different centres but even in the same centre.

(b) *Docks*.—This province has no seaboard. With just a few exceptions its rivers are not navigable; only portions of the Ganges and of the Gogra are used by small passenger and cargo steamers. Landing places used by steam and row-boat ferries and by flat-bottomed boats used for the transport of timber, firewood, building-stone, stone ballast, grain, etc., are scattered all over. The labour engaged on the transport or transshipment of goods is, broadly speaking, casual and is usually employed on the piece-wage system. The total number of men so employed is very small.

(c) *Other industrial establishments*.—Under this heading it will be convenient to deal with a few of the most important and typical cottage industries.

Hand-weaving is easily the most important cottage industry. But, broadly speaking, it is non-capitalistic. Normally the entire family share in the work and little hired labour is employed. There are, however, exceptions, *e.g.*, at Benares, Shahjahanpur and Mau which have some weaving establishments on a capitalistic basis. Hired labour normally works eight to nine hours per day throughout the year and few holidays except some religious festivals are observed. It is not unusual, when demand is keen, to put in up to ten hours, and in rare cases even up to fourteen. The normal weekly working period (all the seven days of the week) is between fifty-six and sixty-three hours. Preparatory processes are usually done by women and sometimes even the weaving is done by them.

The case of the Benares silk and brocade and other artistic fabrics industry is similar. The normal working time is seven hours a day, but when the demand for goods is keen, as it is during the marriage or the tourist seasons, the period goes up to ten or even fourteen hours. But in the case of this industry also little hired labour is ordinarily employed. The weaver and his family do all the work, including the buying of the raw materials and the sale of the finished goods.

At Moradabad hired labour is engaged on a larger scale than in many cottage industries, but payment is ordinarily by the piece and not by time. Allowing a half holiday on Fridays, the normal weekly working time is sixty-five hours, *i.e.*, ten hours per day.

In the leather-working establishments at Cawnpore and Agra most of the work is done by hand. Leaving out a few concerns, little machinery is used except for sewing and pressing, and the application of mechanical power is rare. At Agra, Friday is often observed as a holiday, and the normal working day is of eight hours. But at Cawnpore it is nine hours, and no regular holiday is observed though certain festivals are. When, however, work is done for piece-wages, and especially if it is taken home, the normal period of work is ten to twelve hours.

The carpet-making industry of Agra has a normal working period of eight to nine hours a day; Sunday is often observed as a holiday. Though no special enquiry about the hours of work in the Mirzapur carpet industry was made, the customary period of work there also is in all probability not materially different.

The conditions of work in the *durrie*-making industry of Cawnpore, Agra and Bareilly are substantially the same. But when wages are paid by the piece, it is not unusual at the height of the busy season to put in ten or even up to fourteen hours per day.

The carpentry and furniture-making industry of Bareilly has a normal working period of eight hours per day in the smaller establishments; for piece-wages nine to ten hours is normal. Holidays are seldom observed.

The working period in the Farrukhabad, Lucknow, Muttra, Agra and Bulandshahr printing industry is essentially the same.

*Conclusions*.—Leaving out busy seasons and bearing in mind that a good deal of the work in cottage industries is done on the piece-wage system and that as a rule few such industries employ hired labour, it would be fairly correct to say that the normal daily and weekly working periods are eight to nine and forty-eight to fifty-four respectively for time-wages and ten to twelve and sixty to seventy-two respectively when wages are paid by the piece. On the average the number of working days in a year varies between 275 and 300. But it is necessary to emphasize that it is rare to find fixed hours of work or a fixed number of working days per week or year. There is great diversity in the practice prevalent at the various centres and even in the different establishments. The figures cited above are little more than approximate averages.

The work however is done under circumstances so different from those in power factories that the contrast may be pointed out here. There is none of the noise, vibration and stuffiness which characterize the average power factory. There is

nothing to rack the nerves or fatigue the mind. A good deal of the work is done in the open—in the courtyard of the worker's house or even in the public street or lane. There is no discipline to observe. Rest and recreation are taken whenever the need is felt. Contact with the home and the familiar surroundings is seldom interrupted. The usual amenities of social life are not disturbed. The training of apprentices (members of the family or relatives and castemen) goes on along with the regular work. The temptations to drink or to sexual irregularities which affect the factory worker in towns like Cawnpore are almost entirely absent. These are weighty considerations which should not be lost sight of when balancing the working period in cottage industries against that in power and other factories for organized mass-production.

80. *Desirability of regulation.*—The Superintendent of Census Operations, 1921, remarked that the carpet-making industry of Mirzapur appeared to him to be carried on under "the most ideal conditions," the management financing the purchase of raw materials, controlling the designs and marketing the product and the craftsman taking the work home and doing it with the help of his family in his own time.

Though all cottage industries are not so organized, these remarks are fairly applicable to cottage industries in general. Plain cotton-weaving has to face the serious and ever-increasing competition of the power mills. The industry is steadily going down and the men whose ancestors have been engaged in it for generations have to work harder and harder in order to eke out a subsistence. This is an economic necessity due to maladjustment between the old conditions and the new, though the latter have been in operation for some decades. To some extent this is true also of plain silk-weaving, of the metal utensils industry and of those artistic crafts of which the products are no longer as fashionable as they used to be. In the case of all such industries where the hours of work exceed the normal eight to nine, an attempt to restrict them will only lead to a more serious evil, viz., reduction of earnings. The industries concerned cannot bear any such reduction. The piece-wage system and the generally non-capitalistic character of many cottage industries and the conditions under which they are carried on provide some measure of automatic regulation. Lastly, the administrative difficulties of enforcing any such regulation would be immense, and the cost to the industry and the State, the inconvenience to the men engaged and the scope for corruption so great, that in this Government's opinion an attempt to regulate the working hours must be set down as impracticable.

*Statement showing percentage of factories by districts which worked more than fifty-four hours per week in 1928.*

District.	Total number of factories.	Percentage.	Predominant industry.
Agra .. ..	26	70·8	Cotton spinning and ginning and pressing.
Aligarh .. .	34	94·1	Do. Do.
Allahabad ..	26	50·0	Printing, glass and sugar-refining.
Bahraich .. .	4	100·0	Rice-hulling and oil-pressing.
Banda .. ..	2	50·0	Cotton ginning and pressing.
Bara Banki ..	2	50·0	Manufacture and repair of small cane-crushing mills.
Bareilly* ..	8	41·0	Matches, rosin and turpentine, wood-working.
Benares .. .	15	92·86	Cotton spinning and weaving, aluminium-ware, hemp-baling.
Bijnor .. ..	1	100·0	Glass works.
Budaun .. .	3	100·0	Cotton spinning, cotton ginning and pressing.
Bulandshahr	13	92·31	Cotton ginning and pressing.
Cawnpore ..	64	82·26	Cotton and wool spinning and weaving, leather, engineering and oil-pressing.
Dehra Dun ..	16	68·75	Tea.
Etah .. ..	5	100·0	Cotton ginning and pressing.
Etawah .. .	8	100·0	Do.
Farrukhabad	4	100·0	Do.
Fatehpur ..	1	100·0	Do.
Fyzabad .. .	4	50·0	Rice-hulling and lime grinding.
Ghazipur .. .	2	50·0	Government opium factory.
Gonda .. ..	1	100·0	Railway running shed.
Gorakhpur* ..	12	75·0	Sugar.

\* Note.—The railway workshops at these places have not been mentioned in this statement.

*Statement showing percentage of factories by districts which worked more than fifty-four hours per week in 1928.—contd.*

District.	Total number of factories.	Percentage.	Predominant industry.
Hamirpur ..	1	100.0	Cotton ginning.
Hardoi ..	1	100.0	Do.
Jhansi* ..	6	83.3	Do.
Kheri ..	1	100.0	Sugar.
Lucknow* ..	27	44.4	Cotton spinning, paper, printing.
Mainpuri ..	3	100.0	Cotton ginning and pressing.
Meerut ..	4	100.0	Do.
Mirzapur ..	1	100.0	Cotton spinning and weaving.
Moradabad ..	8	100.0	Cotton spinning, cotton ginning and pressing.
Muttra ..	9	100.0	Cotton ginning and pressing
Naini Tal ..	3	33.3	Cotton ginning and pressing and oil pressing.
Pilibhit ..	2	100.0	Sugar and oil-pressing.
Saharanpur ..	15	53.3	Cotton ginning and pressing, tobacco.
Shahjahanpur	4	75.0	Sugar including distillery, army clothing.
Unao ..	2	100.0	

\* NOTE.—The railway workshops at these places have not been mentioned in this statement.

### **X.—Special Questions relating to Women, Young Adults and Children.**

#### *A.—Factories.*

81. *Effect of 1922 Act on Employment*—(i) *Of women*.—A statement has been given at the end of this chapter showing the number of women and children employed in regulated factories and also the proportions of women and children to the total number of factory operatives in each of the last ten years, 1919–1928. It will be seen that the percentages have been declining. The statement should, however, be read in the light of the following remarks.

A certain number of factories not regulated by the old Factories Act came under the new Act in 1923. These smaller factories employing between twenty and fifty persons employ a large number of women. Many of them are tea factories and a few are small ginning factories. In the tea factories in particular women form a large proportion of the operatives, and almost the entire work of cleaning the manufactured tea is done by them. In ginning factories also women form a large proportion of the workers. In 1926 the number of women employed in the smaller tea factories alone was a little over 800. This is fairly typical. If the number of women employed in these factories which were not regulated before the 1922 Act is excluded, and if at the same time it is remembered that the total number of factory operatives has been rising from year to year, the extent of the drop in the number of women employed since the amending Act of 1922 came into force will be better appreciated. During the period 1919–1922 the average number of women employees was 6,138; the average for the six succeeding years was 6,033. The percentage of women operatives to the total number of factory operatives was 8.81 in the first period; in the second period it fell to 6.94. These figures should be read in the light of the note at the foot of the statement appended. Besides this, allowance should be made for the fact that, to a certain extent, the restrictions placed on child labour encouraged a larger employment of women on jobs which formerly used to be done by children, though this effect cannot be assessed in statistical terms. If, however, women and children are grouped together, the average went down by 9.48 per cent. (viz., from 8,372 in the first period to 7,578 in the second), in spite of the fact that the total number of factory operatives rose considerably.

(ii) *Of young adults*.—This class has not been specifically defined in the Act. Section 19 B refers to persons under eighteen years of age and prohibits their employment as well as that of women in certain processes. The Act defines children as persons between twelve and fifteen years of age. Young adults may, therefore, broadly speaking, be taken to be those between fifteen and eighteen.

No separate statistics are available for this group. In the reports on the working of factories young adults are grouped with adults.

(iii) *Of children*.—The statement appended shows that the number of children has gone down from an average of 2,234 for the four years 1919–1922 to an average of 1,545 for the six succeeding years. The proportion of child operatives to the total number of factory operatives went down from an average of 3.21 per cent. in the first period to an average of 1.89 per cent. in the succeeding one.

*Other effects.*—No information is available as to the other effects of the restrictions placed by the 1922 Act on the employment of women. As the chief restriction was the prohibition of employment of women at night in ginning factories—a majority of the women are employed in such factories—it is safe to assume that it has enabled a good proportion of the women operatives to look after their homes more than they might otherwise have done.

The prohibition of the employment of children under twelve has not yielded as satisfactory results as it would have done if facilities for education had been concurrently expanded and compulsion been introduced. Certain progressive municipalities have introduced compulsion, but in many of them it is in force only in selected portions. Where compulsion is in force in selected portions, the children of factory employees tend to be left out of its scope, as the wards largely inhabited by factory labour are usually backward, and therefore considered unsuitable for the application of compulsion. To a certain extent, therefore, children prohibited from working in the factories have either helped in domestic work or been employed in non-factory work or have idled away their time. Complaints have been made that children who are left derelict and those living with relations other than parents are apt to develop vagabond habits through lack of occupation. It cannot, however, be denied that the prohibition has to a certain extent helped the cause of education among the children of factory operatives.

82. The Factories Act gives the inspector the power to prohibit the admission to factories of children who cannot by reason of their age be lawfully employed therein and whose presence involves danger to them or injury to their health.

In practice infants are not permitted in the factory proper unless they are kept in special creches. There are only about half a dozen such creches in the province, all in Cawnpore. In some factories, notably cotton-ginning and tea factories, women workers are allowed to bring their infants and young children into the factory compound, but not into the factory buildings. Ginning factories employ many women on the cleaning of the cotton bolls (*kapas*) and the tea factories employ them on the cleaning of manufactured tea. Both these processes are carried out in a separate shed or in the compound, and no machinery is used for such processes.

83. *Suitability of Regulations for Women's Work and (84) Affecting Children.*—This Government have no modifications to suggest.

85. Double employment of children has been prohibited by the Act, and, so far as this Government are aware, does not occur. No prosecution has been instituted within the last five years for a breach of this provision of the law.

86. *Work and Training of Young Adults.*—The law (Section 19 B) prohibits their employment in certain processes, and regulates it in certain other processes. The prohibition and the regulation are both enforced. In other respects the work of young adults does not differ from that of other adults.

No facilities for their training other than those mentioned in Chapters II, V, and VI are available. So far as this Government are aware, no factory maintains special classes for their training. They pick up their work from the older and experienced operatives who are sometimes their relations or friends.

87. *Extent of "Blind Alley" Employment.*—This question has hardly been examined. Where such a very high proportion of labour generally is unskilled or semi-skilled there can be very few occupations followed by children or young adults which handicap them from earning an average working man's wage in later life. No precise information is available.

88. *Comparative Merits of the Double and Single-shift Systems as Affecting the Health of Women, Young Adults and Children.*—This problem has not been studied. The law prohibits the employment of women and children at night. Textile factories usually adopt two shifts of children of five hours each, different boys working on the morning and the afternoon shifts. In this case there is no difference between one shift and the other as regards their health.

The employment of young adults on night shifts does occur, but as no separate statistics are maintained for this group, the extent of such employment is not known.

89. *Work of Women and Children in unregulated Factories*—(i) *Use by local Governments of Section 2 (3) (b).*—Only one factory (the East Indian Railway's oil mill at Manauri) has been notified under this section. For many years past there has been no addition or alteration.

The Manauri factory employs 354 persons, of whom 191 are women and 4 children. They are both employed on the cleaning of oil seeds. The conditions of work are among the best in the province. The factory maintains a hospital including a maternity section and gives maternity benefits.

(ii) *Advisability of extended application.*—This Government have not considered this question and are unable to formulate their views thereon. In this connection their views as to the desirability of regulating cottage industries may be seen (*vide below*).

## C.—Other Establishments.

92. *Need for Regulation.*—For this Government's view the remarks on (80) may be seen. They consider it impracticable to regulate the work of women and children, or even of men, in cottage industries.

*Statement showing the Number of Women and Children Employed in Regulated Factories.*

—	1919.	1920.	1921.	1922.	1923.	1924.	1925	1926	1927.	1928.
(i) Total number of working factories.	215	218	218	245	240	257	276	313	332	338
(ii) Total factory labour ..	66,906	69,947	69,172	72,545	73,906	77,202	78,942	85,517	88,319	86,531
(iii) Number of women ..	6,387	6,423	5,714	6,026	5,555*	5,448*	5,638*	6,645	6,567	6,343
(iii) (a) Average of (iii) for certain years.	6,138				6,033					
(iv) Percentage of (iii) to (ii) ..	9.54	9.18	8.26	8.31	7.52	7.06	7.14	7.77	7.44	7.33
(iv) (a) Average of (iv) for certain years.	8.81				7.38. But, as explained in note below, 6.94 has been taken as the average for this period.					
(v) Number of children ..	2,402	2,581	2,189	1,765	1,571	1,379	1,866	1,770	1,606	1,076
(v) (a) Average of (v) for certain years.	2,234				1,545					
(vi) Percentage of (v) to (ii) ..	3.59	3.69	3.16	2.43	2.13	1.79	2.36	2.07	1.82	1.24
(vi) (a) Average of (vi) for certain years.	3.21				1.89					

*Note.*—The big jump from 5,638 [column (iii)] in 1925 to 6,645 in 1926 is, to a large extent, unreal. The smaller tea factories had claimed that they were not factories under the 1922 Act. This claim was allowed in the beginning. When it was examined afresh, it was decided in 1926 to bring such factories under the 1922 Act. The number of women employed in such factories in 1926 and in 1927 was found to be about 800. Hence the figures under 1923, 1924 and 1925 should be raised by some such figure in order to get an idea of the number of women operatives in establishments of the class which are now registered as factories in each of those years. But as tea and ginning factories employ a larger proportion of women than other factories do, and as few ginning factories were brought under regulation by the 1922 Act, it will give a better idea of the effect of the 1922 Act on the extent of women's employment if 800 is deducted from the figures for 1926, 1927 and 1928 and a percentage of women operatives then taken. If this be done the average percentages of women employees in factories (other than the newly regulated tea factories), works out at 8.81 and 6.94 for the periods 1919-1922 and 1923-1928 respectively.

A more accurate idea of the extent of the effect of the 1922 Act on women's employment could be given if it were possible to ascertain the percentage of women operatives to the total number of operatives in regulated ginning factories up to 1922 and the percentage of women operatives to the total number of operatives in ginning factories employing fifty or more persons in the period 1923-1928. The margin of error now left is the female labour in the ginning factories brought under regulation by the 1922 Act. Their number is small and hence this can be ignored.

## XII.—Wages.

96. *Prevailing Rates of Wages and Earnings.*—(i) *In factories.*—For the reasons stated in Chapter XVIII (paragraph 143) below, the information available to the Government on the subject of wages in registered factories has been very meagre. There has never been any comprehensive or scientific investigation made of the subject in this province, and the time allotted for the preparation of this memorandum did not permit the undertaking of a special enquiry. A careful examination of the available figures has shown that the information collected in the past about rates of wages can only be regarded as unreliable, and that there is hardly any information at all either about average earnings or the difference between money wages and the money value of all earnings in the case of industrial labour. This is particularly so in the case of skilled labour. Some figures are available to show rates for agricultural labour, and for unskilled labour which are fairly reliable and which illustrate the trend of wages in recent years. The chief inspector of factories usually makes some reference to wages in his annual report, and publishes therein a brief statement showing "average monthly wages" (for the whole province) of various classes of skilled and unskilled industrial labour. After considering the method by which these averages have been calculated, and testing certain items individually, the Government have decided that they contain so many possible sources of error that no conclusions of value could be based on them. The chief inspector of factories has not sufficient staff to verify in detail the information which he receives, although he satisfies himself as far as possible that the figures are *prima facie* reasonable. The designations of the various types of employment do not always have a uniform meaning. An engine-driver, for example, may be an employee of very different importance in a small factory in the country and in a big mill in Cawnpore. Hence the reported wages for certain classes of employees vary within wide limits. Allowances also have to be made for the seasonal character of certain industries. These

may pay higher rates of wages for the season during which they work than are paid by factories working all the year round. No information is available about the numbers of employees employed on various rates, and without this reliable average rates cannot be obtained, even for men on monthly rates of pay; while the piece wage system practised in the province is a complicated one from which it is difficult to arrive at piece-work earnings which would be generally accepted as correct. A statement is given at the end of the chapter showing the rates given by the chief inspector as average rates for the province for workshop coolies (unskilled) for the years from 1919 to 1928, and some comparable figures for 1913 and 1914. Even these are not reliable for all purposes, but they give some indication of the way in which wages have moved. Some figures relating to prices are given in Statement III. More detailed information about wages will no doubt be given in the evidence of employers' associations and of trade unions.

*In Cottage Industries.*—Wages and earnings of cottage workers vary from centre to centre and industry to industry. Provincial averages are not available. A few specific examples can be quoted. At Benares the average daily earnings of a skilled worker vary from 8 annas to Rs. 2, according to his capacity, the industry in which he is engaged, its prosperity and the season. At Agra, skilled workmen engaged in the boot and shoe industry earn from Re. 1 to Re. 1-8 annas per day. In the carpet industry these wages vary from Re. 1 to 12 annas for boys. The general level of wages for cottage weavers has not been ascertained. But special enquiries made gave variations of from 8 annas for silk weavers in the towns to 4 annas and 5 annas in the villages.

*In the Tea Industry.*—In the tea plantations of Dehra Dun the average monthly earnings of a man are about Rs. 12-8 annas per mensem. The daily wage is proportionately a little higher. Men get about 8 annas, women 4 to 6 annas and boys and girls 3 to 5 annas.

It should, however, be noted that labour on the plantations is in many ways akin to agricultural labour, and that wages are, therefore, similar to those for agricultural work, and, further, such workmen get many concessions by way of fuel, grazing, medical treatment and even housing accommodation. The monetary value of these has not been taken into calculation in the cash wages stated above.

*On Sugar Cane Farms.*—The rates of wages paid by sugar cane farms and the sugar mills of the Gorakhpur district naturally reflect the average local level for general unskilled and agricultural labour, which in that district was found to be among the lowest in the province.

*In the Public Works Department.*—The following figures have been supplied by the Public Works Department and furnish useful information about the daily rates prevailing in 1914, 1920 and 1929:—

Class of workman.	1914.			1920.			1929.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Mason .. ..	0	8	0	1	0	0	1	2	6
Carpenter .. ..	0	8	6	1	1	0	1	5	3
Blacksmith .. ..	0	9	6	1	3	0	1	5	3
Painter .. ..	0	10	0	1	4	0	1	2	6
Bhisti .. ..	0	5	0	0	10	0	0	12	0
Beldar .. ..	0	3	9	0	7	6	0	8	3
Coolie .. ..	0	2	9	0	5	6	0	6	3
Hammerman .. ..	0	8	3	1	0	0	0	12	0
Thatcher .. ..	0	5	6	0	11	0	0	15	0

The Irrigation Department has reported similar rates.

97. *Movements in recent Years.*—Broadly speaking, there were three critical periods in recent years during which wages rose. During the latter part of the war, prices began to rise and wages, though always lagging behind, tended to follow suit. Following upon the failure of the rains in 1918 and the havoc wrought by the influenza epidemic of 1918-19 (which took a toll of 2·8 million lives in this province) wages rose sharply. The two or three years after the termination of the war saw an industrial boom, which pushed wages up at a time when the boom itself was subsiding. Since 1922-23 the general wage-level has been comparatively stationary with a slight tendency to decline. The best real index is furnished by the common workshop coolie's wage. This reached its zenith in 1921-22 and has been very slowly declining. Though the working period in regulated factories was reduced to 60 hours per week by the 1922 Act, the restriction, broadly speaking, only affected the earnings of piece-work earners, especially weavers. The other classes mostly managed to hold the position which they had already won for themselves.

In the case of cottage industries it is difficult to give figures to define or describe the recent changes in the wage-levels. As cottage industries are largely rural and as in their case movements of agricultural wages exercise a direct and immediate influence, an indication can be obtained from the changes in the wages for unskilled and skilled rural labour (e.g., carpenters and blacksmiths). Between 1916 and 1928 wages for unskilled rural labour rose by 50 per cent., those for agricultural labour rose by 60 per cent., and the wages of carpenters and blacksmiths rose by 80 per cent and 70 per cent. respectively. It is noteworthy that the wages of the coolies employed at the railway goods sheds rose by 48 per cent. between 1916 and 1928; this gives a fair indication of the rise in the unskilled factory labourer's wage. The figures for the following districts (arranged in order of importance as judged by the number of factories) are of some importance as they give an indication of the extent of the rise in the wages for skilled and unskilled labour in the factory and cottage industries of those districts :—

District.	Comparison of rates of wages in 1916 and 1928, showing the increase as percentage of the 1916 wages.		
	For general unskilled labour (rural).	For rural skilled labour.	
		Carpenters.	Blacksmiths.
(i) Cawnpore .. .. .	64	143	124
(ii) Aligarh .. .. .	67	121	71
(iii) Agra .. .. .	54	121	50
(iv) Saharanpur .. .. .	33	78	78
(v) Allahabad .. .. .	90	140	100
(vi) Lucknow .. .. .	60	71	60
(vii) Gorakhpur .. .. .	29	48	19
(viii) Dehra Dun .. .. .	78	33	33
(ix) Benares .. .. .	55	135	108
(x) Bareilly .. .. .	45	54	—
(xi) Moradabad .. .. .	50	77	82

(For the factors affecting the variation in the rise between different districts the 1928 census of rural wages should be consulted.)

98. *Amounts sent to Villages.*—No accurate information on this subject is available. The census reports furnish some figures, especially for those districts from which emigration of labour on a considerable scale takes place. But these figures include ordinary trade remittances, and even though such remittances are not believed to form a large proportion of the total, the figures do not give a precise idea of the savings sent home by emigrant labourers.

A special enquiry in the case of an important cotton mill at Cawnpore in which wages are paid fortnightly has, however, yielded a little information. During a particular fortnight 3·8 per cent. of the wages received by workmen was remitted by money orders through the post office attached to that mill (viz., Rs. 700 out of Rs. 18,500). The proportion of remittances by employees other than workmen and by outsiders was not, however, known. It is also very probable that some money was sent home by workmen through friends and relatives and through other post offices. These figures, therefore, give little idea of the real proportion of wages sent home. Estimates have been prepared of the average savings sent home by workers on the tea plantations of Dehra Dun. As these have not yet been carefully scrutinized they have not been incorporated in this report.

99. *Payment in Kind and Allied Problems.*—In the regulated factories, payment in kind is almost unknown. In cottage industries it is believed to be exceptional. In 1924 a special inquiry was made and the chief inspector of factories reported that in only three out of the 257 factories working in that year could he ascertain the prevalence of the system of part-payment of wages in kind. Two of these three had reported to him that the acceptance of wages in kind was voluntary.

The practice of compelling a workman to accept a portion of the material damaged by him in the course of manufacture at cost price, or sometimes at market rates, is an allied but different question.

At the last rural wage census (1928) it was found that even for purely agricultural labour payment in kind was being gradually replaced by cash wages.



101. *Method of fixing Wages*—(i) *By negotiated agreements*.—This method is practically unknown. In some factories the workman has to sign a printed document with a counterfoil containing the rules and conditions of work, but so far as can be ascertained, it does not specify the rate of wage mutually agreed upon.

(ii) *By other means*.—There are no labour employment agencies or exchanges. Most workmen are engaged at the factory gate or brought in by friends and relatives among the workmen, or by jobbers or supervisors who fix the wage to be expected by the recruit. The agreements are almost invariably verbal and no written evidence is maintained to prove the wage thus agreed upon. Changes of wages are usually regulated by the schedules maintained by the management. It is noteworthy that disputes about rates or about wages due are almost unknown.

103. *Extent of Standardization*.—Little information is available about the rates for various classes of work paid by various factories. Broadly speaking, the system on which wages are regulated lacks standardization. Wages vary not only according to the individual workman's skill, industry and experience, but also from concern to concern and industry to industry. Such standardization as exists is, generally speaking, confined to (1) the wages of unskilled and semi-skilled labourers and of some forms of skilled labour, (2) the schedules current in a particular concern for piece wage earners (e.g., weavers, spinners), and (3) the minimum wage which many factories offer for each class of work.

*Note*.—This minimum wage is different from that referred to in paragraph 105 ; the latter is based on the cost of subsistence in tolerable comfort.

104. *Effect of Wage Changes on Labour Supply*.—Within certain limits wage changes do not appreciably affect labour supply. Unskilled and semi-skilled labour can be had in plenty ; a slight reduction does not, therefore, affect the supply to the same extent as in theory it might do. Secondly, for various reasons, labour is not as mobile as it is in other countries. Intelligence about employment available elsewhere is disorganized and meagre. In certain industries (e.g., paper-making) the number of units is small and, therefore, migration to or from one unit when wages are reduced or increased in another is not an easy matter. Lastly, there is a certain amount of floating labour which enables the employer to reduce wages without seriously affecting labour supply. This has actually happened twice in the case of the paper mills at Lucknow.

Beyond certain limits, however, wage changes are bound to affect labour supply, but owing to various reasons the adjustment between wage changes and labour supply is less direct than in many other countries.

105. *Minimum Wages*.—This Government's views were recently communicated to the Government of India on this subject. For various reasons they considered it impracticable and inadvisable to establish and maintain minimum wages by legislation, especially in unorganized and cottage industries.

106. *Deductions*—(i) *Extent of fining*.—No systematic information on this subject from year to year is available. In response to an enquiry from the Government of India in 1926, some information was collected. The chief inspector of factories found that the practice of imposing fines for various reasons was prevalent in a large proportion of the regulated factories. Fines could be classified as (i) disciplinary and (2) compensatory. For persistent default the usual penalty was dismissal. A variant of the cash fine was the system prevalent in many weaving mills whereby the workman had to buy the whole or a portion of the cloth damaged by him. To such fine, however, there was a maximum limit. The chief inspector also found that this system of fine was more popular than cash fines. A few of the facts then ascertained are given below ; no further information is available.

In 1924 the chief inspector of factories had found that the number of factories in which fines had been imposed did not exceed 58 per cent. ; the proportions in the succeeding years are not known. In response to the enquiry made in 1926, the Bengal and North-Western Railway reported that in their workshops at Gorakhpur, the aggregate amount of fines imposed during a period of six months amounted to a little under 0·05 per cent. of the total wage bill (viz., Rs. 209 out of Rs. 3,52,000). A cotton-ginning and pressing factory reported that in that factory the annual aggregate rarely exceeded Rs. 7. An important cotton mill at Cawnpore, reported that few fines were imposed for disobedience or indiscipline and that their aggregate did not exceed a few rupees a year. It added that the maximum fine imposed on an individual worker during a fortnight did not exceed 3 annas, and that the quantity of cloth which workmen had to buy compulsorily on account of damage in the process of manufacture did not exceed 0·003 per cent. of the total out-turn of the weaving sheds. An important cotton mill replied that in its spinning department the fine rarely exceeded one day's pay for a serious breach of the rules, and that for very bad work the fine was 2 to 4 annas. Another big cotton mill reported that it had a regular system for fines, viz. (1) 4 annas to Re. 1 for disobedience, spitting on the

walls and uncleanness, (2) 4 annas to Rs. 5 for damage and breakage. In that mill the number of weavers who had to buy damaged cloth was reported to be 1 per cent. and the value of cloth so bought to average 10 per cent. of the wage. In another mill the number of weavers so fined was reported to be about 20 to 25 per cent. and the average value of the cloth bought under such compulsion about 5 to 6 per cent. of the workmen's wage. The position as summed up by the Upper India Chamber of Commerce in respect of the interests represented by it was as follows :—

(i) The maximum number of workmen fined in any period did not exceed 3 per cent; (ii) compensatory deductions did not perhaps exceed 0.25 per cent. of the wages earned.

In a glass factory, fines amounted to 0.2 per cent. of the wage bill. On the railways there is a regular system for fines.

(ii) *Other Deductions.*—Apart from the compensatory fines discussed above, no other deductions are known to be in force. Subscriptions to clubs, dispensaries, etc., are voluntary, but outside the few settlements that exist there are few clubs of workmen in existence.

(iii) *Utilization of Fines.*—Some concerns utilize the receipts from fines for welfare work or for granting a bonus, but in a majority of them the fines are kept by the employers. Detailed information in respect of all concerns is not available but a few illustrations can be given. The East Indian and the Bengal and North-Western Railways and the British India Corporation utilize them for general welfare work. A glass factory utilizes them towards the maintenance of a dispensary. A cotton mill at Cawnpore sets apart 20 per cent. for the medical treatment of the workmen and 80 per cent. for the bonus fund.

(iv) *Desirability of Legislation.*—On this subject this Government consulted the various interests involved and also a few administrative officers. The opinions received were found to be divided along the usual lines. The enquiries made by the Government satisfied them that while the practice of fining workmen was general, there was no indication that it was abused, except perhaps by some of the smaller manufacturers whose employees were not villagers. Further, most of the larger firms were found to employ fines for the benefit of the operatives themselves in various ways. This Government's view was that there was no reason for recommending that the employer should be legally debarred from fining undisciplined, defaulting or destructive workers and they informed the Government of India accordingly. During the two years that have since elapsed, no reasons have come to this Government's notice for revising their opinion and recommendation.

107. *Periods of Wage Payment.*—(i) *Periods for which wages paid.*—In response to a reference by the Government of India in 1924, the Chief Inspector of Factories made inquiries during the time at his disposal. He found that (1) about 43 per cent. of the factories paid all their employees monthly, (2) about 30 per cent. of the factories paid all their employees fortnightly (3) no factory paid all its employees weekly (4) about 54 per cent. of the factories had several distinct classes of labourers some of whom were paid monthly, some weekly, some fortnightly and some daily, (5) in some cotton mills the office staff was paid monthly, operatives fortnightly, and a few casual labourers daily. Statement II at the end of this chapter sets forth in greater details the results of his enquiries.

As regards cottage industries the piece-wage is generally paid on the completion of the work. Where wages are paid by time, the usual wage-period is a fortnight. In the tea plantations of Dehra Dun and the sugarcane plantations of Gorakhpur, the usual wage-period is a month. On the railways also the usual practice in the case of men in receipt of wages calculated monthly is to pay wages monthly.

(ii) *Periods elapsing before Payment.*—The last column of the statement referred to above shows the normal period after which wages are paid and the considerable diversity that prevails. Speaking broadly monthly wages in the larger establishments are paid within 10 to 15 days, and fortnightly wages within 10 days. In the smaller establishments the period does not generally exceed three days. Weekly and daily wages are in a majority of cases paid soon after they become due, the practice being fairly similar in the larger and the smaller concerns.

\* In the case of cottage industries it is more difficult to generalize as the diversity of practice is greater. The worker often receives some payment in advance, and the balance on completion of the job. Sometimes further advances are made while the work is still in progress. In some cases such advances take the form of interest-bearing loans, the account being continued over a long period. On the tea plantations of Dehra Dun the usual period elapsing before payment is ten days, but on the sugarcane plantations of Gorakhpur the normal practice is to pay the wage soon after it is earned.

(iii) *Desirability of Legislation.*—(a) *To regulate periods.*—This question was considered in 1925. After considering the opinions received this Government's

conclusion was that the weekly period of payment was not wanted, and that there was no other valid reason for interfering with the freedom of contract between the employer and the employee to give and receive wages at such periods as they choose or approve. They see no reason to modify the view then expressed.

(b) *To prevent delay in Payment.*—On this question too, the views of this Government were communicated to the Government of India in 1927. Public opinion as then ascertained was found to be fairly evenly balanced, but the demand for statutory regulation was found to be insignificant. Government thought the difficulty and expense of enforcing the law through the agency of a paid inspectorate would be unduly great and advised the Government of India that the proposed legislation should not be proceeded with.

(iv) *Treatment of Unclaimed Wages.*—As in the case of the utilization of fines, there is great diversity of practice in the treatment of unclaimed wages. Broadly speaking, unclaimed wages are treated as lapsed after a fixed period. This period is not uniform. The period of limitation under the general civil law is three years, but it is not known how far the practice in individual concerns accords with the civil law. On the railway and in the paper mill at Lucknow claims made within three years are admitted.

The method of disposal varies. In a great majority of cases unclaimed wages lapse to the employer and are absorbed in the general revenues of the concern. Cases are however known in which they are utilized for other purposes. Thus, the glass factory at Balawali is believed to credit them to the dispensary and clothing funds. Detailed information in respect of individual concerns is lacking.

In unorganized and cottage industries and on the plantations, the treatment of unclaimed wages is believed to be similar, but accurate information is not available.

108. *Indebtedness.*—This question has not been systematically investigated. It is believed that indebtedness is very common among factory operatives and artisans. In the case of labour employed on the plantations the problem is similar to that in the case of agriculturists and agricultural labour.

No enquiry has been made into the causes of indebtedness. A large proportion of it is due to expenditure on the acquisition or possession of land, including the incidental litigation. Social ceremonies on the occasion of marriages, births and deaths in the family involve expenditure on a scale altogether beyond the working man's means. Sickness is a frequent cause leading to indebtedness. The average labourer's mentality is such that indebtedness tends to be chronic, and to be regarded as in the nature of things. One big employer once said that the average factory operative had an innate capacity for getting into debt and remaining in it.

The moneylenders or creditors may be grouped into four classes: (a) the employer who makes a loan or a payment of wages in advance, the distinction between wages paid in advance and loans being often blurred (b) the common moneylender, sardar or chaudhri, (c) the Pathan moneylender, and (d) co-operative societies. In organized industry it is rare to come across cases of money lending or of advances by employers. But in unorganized and cottage industries it is very common—so common as to be one of the characteristic features of the system on which cottage industries employing hired labour are carried on. If wages are paid in advance, interest is sometimes charged. It is almost invariably charged on loans. The general rate of interest for such loans and advances varies between 12 and 24 per cent. per annum. On the plantations loans are very rarely made by employers, but wages are sometimes paid in advance. Factory operatives have usually to rely on the common moneylender including the pawnbroker and the sardar or chaudhri for accommodation. The workman in cottage industries as a rule also seeks and obtains such accommodation as he needs from the moneylender and pawnbroker. The rate of interest charged varies with the nature of the security (personal and collateral) and the personal relations between the parties. But, it rarely goes below 24 per cent. per annum. The usual upper limit is 75 per cent. The Pathan moneylender charges very high rates, usually 150 per cent. but in some cases even 300 per cent. His assistance is however rarely sought except when accommodation is desired for very short periods, or by industrial workmen with very little credit elsewhere. This class of moneylender is, broadly speaking, to be found only in the large towns and the villages in their neighbourhood. A few co-operative societies have been formed at Cawnpore and on the tea plantations. The wage-earning artisans engaged in village and cottage and other unorganized industries are often also agriculturists and therefore sometimes members of such agriculturists' co-operative credit societies as are available in or near their village or town. But, there are no societies for wage-earning cottage artisans as such, though there is a fair number of societies for village and cottage industrialists. Owing to the unstable character of factory labour, lack of homogeneity and the absence of permanent assets to serve as security the formation and working of credit societies for the benefit of factory labourers present

unusually difficult problems. Such co-operative societies as exist can fairly claim to have reduced indebtedness to some extent. But their number and their membership being both small, the co-operative movement can hardly be said to have touched the fringe of the problem of indebtedness among industrial and plantation labourers.

109. *Bonus and profit-sharing schemes.*—*Nature and effect of schemes which are or have been in operation.*—Bonus schemes are in force in several concerns. The bonus is paid for a variety of reasons including regular attendance and economical utilization of material. So far as can be ascertained annual bonus schemes are now in force in only two of the Cawnpore concerns though about half a dozen are known to have given a bonus at some period or other. A few concerns have paid an annual bonus for several years past. The annual bonus is in some respects similar to a profit-sharing scheme. It is paid out of the profits (if any) for the year and takes the form of a percentage of the total wages earned by a workman during the year. It is rarely given if no profits have been made or if profits are small. Details vary and full information is not available but a few illustrations based on information specially collected might be given. One of the cotton mills at Cawnpore pays a bonus of Rs. 2-8 annas for regular continuous attendance and of Re. 1 for attendance on all days except one. A leather-working factory gives credit in the form of a bonus for economical cutting. A sugar factory in Gorakhpur district pays bonus on a fixed sliding scale varying with the profits made, and another sugar factory and a paper mill give one on a fixed scale in years when a minimum of profit is made.

The successful working of a profit-sharing scheme pre-supposes the realization by the workmen of an identity between the various interests engaged in the concern and a conscientious effort on their part to do their best for its maximum success. The employer of labour does not feel that labour conditions in the province are such as to justify a hope that this high co-operative ideal will be realized in a substantial measure in practice. Hence, so far as can be ascertained, such schemes have not been tried and there is none in operation.

In unorganized and cottage industries and on the tea and sugar cane plantations no bonus or profit-sharing scheme is believed to be in operation.

In this connection might be mentioned the system of contributory provident funds prevalent in a few concerns, usually for the permanent staff. The railways have this system for their supervising staff though not for the lowest ranks of the labour force. One sugar factory gives its permanent employees similar benefits.

The effects of bonus schemes vary according to their character. Bonus paid for regular and continuous attendance and for economical utilization of material should lead to fairly direct and immediate results. But the annual bonus scheme is not popular with the average employer, as discontent and even trouble arise if for some reason the bonus is not paid. Opinion is divided as to whether the existence of such a scheme ensures stability of labour and conscientious work and thus helps to increase the profits and, if so, to what extent. Like a profit-sharing scheme it benefits a worker not as an individual but as a member of a large group and thus lacks the effectiveness of a direct appeal to individual self-interest. On the other hand it has been claimed that it has led both to a larger measure of stability and to good work. This Government have not so far undertaken an inquiry into this question.

110. *Annual leave.*—There is great diversity of practice in this respect. Hence, the following remarks should be treated as illustrative rather than as a general summary of the practice in the various concerns.

The railways usually give to their monthly paid staff both "casual" leave and some "privilege" leave. On the East Indian railway the introduction of a system of casual leave to workmen up to 15 days has been reported. In the factories the privilege of leave on full or part salary is normally confined to the monthly paid staff (including in some cases workmen). The period varies, but two weeks is not unusual. Piece-workers rarely get it if at all. The conditions which are imposed in some concerns on the privilege of leave on full or part salary to workmen (even where such privileges is allowed) often reduce its value considerably. To give an illustration, one factory gives ten days' leave with pay if the workman has put in uninterrupted service for one year; the number of workmen who satisfy this condition is a negligible fraction.

Leave without pay is generally allowed for varying periods. If it is wanted in connection with "social events" (e.g., marriage, sickness or death in the family or among relations) the period normally does not exceed 15 days. If the workman himself falls ill leave of absence is usually allowed, but in such cases no period is fixed.

In unorganized and cottage industries and on the plantations the practice varies. Holidays on full pay are not unknown but leave on full pay is seldom granted. As a general rule holidays on full pay are allowed on the plantations, but even there leave on full pay is not known or believed to be prevalent. Many plantations, however, give neither leave nor holidays on full or part pay. The piece-wage earner in cottage industries does not get leave or holidays on full or part salary.

(i) A considerable proportion of workmen take leave for varying periods for agricultural work, "social events," or sickness. In a certain mill it was ascertained that during a particular year, 986 men took leave to return to their villages. The normal labour force employed in that mill being a little over 2,100 the proportion of men who went on leave to the men employed was found to be nearly 47 per cent. But as the turnover of labour is not known, it is not possible to base on this a calculation of the proportion of men taking leave to the total number of individual workers employed. The peculiar circumstances of this mill give it a high proportion of stable labour. Hence it is reasonable to infer that in the case of other similar concerns the extent to which workmen go away on leave is even larger. Precise information in respect of individual concerns is not available.

(ii) The extent to which unauthorized absence is countenanced depends normally on the circumstances of each case. If a skilled worker with a reputation for regular attendance and good work absents himself he is rarely discharged unless business is very slack. But bad or indifferent workers and men who have proved to be troublesome are frequently dismissed if they are absent without authority. The character of the season, the general briskness or slackness of business and the availability of satisfactory substitutes are other important considerations affecting the employer's decision.

Leave is, generally speaking, not assisted. The railways assist their monthly paid workers by granting free passes on the home railways for journeys home. No other instance of assistance given by employers is known to this Government.

#### STATEMENT I.

*Workshop coolie's average monthly wage in rupees for the whole province for the ten years 1919 to 1928, from information supplied to the Chief Inspector of Factories, and as published by him.*

Class of labour.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
Coolie (workshop) ..	13	16	17	17	16	16	15	14	14	14

For the years 1913 and 1914 the following rates are given :—

	1913.	1914.
	Rs.	Rs.
Coolie or porter (male) .. ..	9	9

#### STATEMENT II.

*Periods of wage-payment in the main industries of Cawnpore.*

—	Period of payment.	Number of days normally elapsing before payment.
<b>A.—Cotton-spinning and weaving mills—</b>		
(1) Atherton West Mills .. ..	Fortnightly ..	10
(2) Muir Mills .. ..	Twice a month ..	10
(3) Elgin Mills .. ..	Fortnightly ..	6 to 12
(4) Cawnpore Cotton Mills .. ..	Ditto ..	15 to 18
(5) New Victoria Mills .. ..	Ditto ..	10
(6) Swadeshi Cotton Mills .. ..	Monthly ..	3 to 15
(7) Juggilal Kamlapat .. ..	Twice a month ..	10
(8) Cawnpore Textiles .. ..	Monthly ..	4 to 10
(9) Woollen Mills .. ..	Fortnightly ..	14
<b>B.—Cotton ginning and pressing factories—</b>		
(1) Juggilal Kamlapat .. ..	{ Gin workers, daily	15
(2) Forbes .. ..		1
(3) Sriram Mahadeo .. ..		10 to 15
	{ Others, monthly	

STATEMENT II.—*contd.**Periods of wage-payments in the main industries of Cawnpore.*

	Period of Payment.	Number of days normally elapsing before payment.
C.—Engineering—		
(1) Empire Engineering Company ..	Twice a month ..	10 (pay days, 10th and 25th).
D.—Brickworks—		
(1) Ford and Macdonald .. ..	Weekly and fortnightly.	1
E.—Flour mills—		
(1) Ganges Flour Mills .. ..	Monthly ..	C. 15
(2) Cawnpore Flour Mills .. ..	Ditto ..	15
F.—Printing presses—		
(1) Job Press .. ..	Monthly ..	15
(2) Star Press .. ..	Twice a month ..	15
G.—Sugar mills—		
(1) Cawnpore Sugar Mills .. ..	Monthly ..	15
H.—Tanneries—		
(1) Cooper Allen's .. ..	Twice a month ..	15
(2) Halim Boot Factory .. ..	Monthly ..	15
I.—Tramways—		
(1) Tram-shed .. ..	Monthly ..	15
J.—Municipality .. ..	Monthly ..	15
K.—Government factories—		
Government Harness and Saddlery Factory.	Monthly ..	7 to 10

## STATEMENT III.

*Showing the prices of the main foodstuffs (expressed in terms of seers per rupee).*

Year.	Wheat.				Common rice.				Dal (arhar).			
	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.
1918 .. ..	8.31	8.47	8.73	5.61	—	—	—	—	—	—	—	—
1919 .. ..	—	6.33	5.65	5.80	—	—	—	—	—	—	—	—
1920 .. ..	5.44	6.43	6.86	6.51	—	—	—	—	—	—	—	—
1921 .. ..	6.24	6.8	5.89	*	*	9.0	4.81	4.49	*	7.0	*	*
1922 .. ..	*	4.57	5.14	4.62	*	5.10	4.13	*	*	5.13	*	*
1923 .. ..	8.2	8.1	8.2	8.6	6.3	5.13	5.9	5.11	7.10	8.2	8.6	8.0
1924 .. ..	8.11	9.6	8.12	7.14	6.7	5.10	5.11	5.4	7.15	7.13	8.6	7.11
1925 .. ..	7.11	6.12	7.4	6.15	5.13	5.4	5.4	5.9	7.14	7.12	8.3	7.2
1926 .. ..	5.14	6.14	6.11	6.13	5.9	5.6	5.1	5.0	5.12	6.6	5.5	5.1
1927 .. ..	7.1	7.6	7.12	8.0	6.2	5.8	5.4	5.11	5.4	4.6	4.12	5.0
1928 .. ..	8.8	8.3	7.6	6.6	5.12	5.14	5.8	5.7	5.0	5.0	5.13	5.8
1929 .. ..	5.12	6.15	8.0	—	5.4	5.8	5.8	—	5.2	5.5	5.13	—

\* Not available.

Note.—Where decimals are not used, seers and chhataks have been shown—sixteen chhataks = one seer.

**XIII.—Industrial Efficiency of Workers.**

112–116. *Recent comparative change in efficiency of Indian workers, and other allied problems.*—There is a certain body of opinion which holds that the Indian workman's efficiency has been steadily rising. The quality of goods made in some textile mills would have been generally considered an impossibility a couple of decades back. In the chapter on "hours" reference has been made to the Chief Inspector of Factories' impression about the opinion of employers in general about the extent to which production has been curtailed as a result of the restriction or the reduction of the daily and weekly working periods in regulated factories. But the problem is both complicated and controversial. This Government have little

information on which to base their conclusions. The Raven Committee's report on the reorganization of the State Railways workshops gives certain useful data, but this Government have not examined them. Hence they do not find it possible to give an opinion on the matters mentioned under headings 95 to 99.

#### XIV.—Trade Combinations.

117. (i) Employers' associations may be registered under the Indian Companies Act by the Registrar of Joint Stock Companies to whom they then have to submit an annual statement about their financial condition. Though the province has fifteen registered trade associations, only three include among their members any large proportion of employers of labour; the rest are predominantly commercial bodies.

The Upper India Chamber of Commerce, Cawnpore, had a membership of sixty-six in 1928, representing not only the commercial but also the leading industrial interests of the province. While it has some Indian members it is predominantly European. Some Government servants, e.g., the Directors of Industries and Agriculture, are made affiliated members as a compliment. It is affiliated to the Associated Chambers of Commerce of India and Ceylon.

The United Provinces Chamber of Commerce, Cawnpore, represents Indian commercial and industrial interests. It has a total membership of one hundred and twenty-six (ninety-seven being local). Some members are also members of the Upper India Chamber of Commerce. It is affiliated to the Associated Indian Chambers of Commerce.

The Indian Sugar Producers' Association, Limited, Cawnpore, is an all-India institution with its office at Cawnpore. It was formed with the object of furthering the interests of the sugar trade and industry.

The Chambers of Commerce at Ghaziabad, Hapur, and Chandausi include a few proprietors of cotton-ginning and pressing factories. The Benares Industrial and Trade Association includes a few employers of labour, but the interests represented by them are, in the main, those of employers (who are semi-middlemen) in cottage factories. Agra, Hathras, Gorakhpur, and Etawah, though industrially of fair importance, have no local chambers.

On the whole, employers cannot be said to be at all completely organized, the only exceptions being the members of the two Cawnpore Chambers and of the Sugar Producers' Association.

(ii) The associations of employees are not all registered. Some of them are in essence "strike committees," and when there is no strike or lock-out they remain in a state of suspended animation.

The province has only five associations registered by the Registrar of Trade Unions under the Trade Unions Act, 1926. Three of these are associations of railway employees, one an association of employers of printing presses and the fifth one of employees of many of the Cawnpore industries. The last two are purely local, but the railway employees' associations include members residing outside their head-quarter towns, though they are naturally confined to the railway concerned. The East Indian Railway, which is the most important railway system in the province, has two unions covering two of the three divisions of the line in this province. The Press Employees' Union, Allahabad, embraces the entire local printing industry. The Cawnpore *mazdoor sabha* is open to any employee in any of the various industries carried on there to which the Workmen's Compensation Act applies. The compact and closely knit unions confined to individual concerns or even the important sections thereof, which are a striking feature of the trade union movement in western countries, are not found here. The five unions are more like federations than unions in the strict sense. Their resources are slender and their membership comparatively small. They are thus hardly capable of undertaking united action.

Besides these five registered unions, there are a few important but unregistered associations, e.g., the Postal Employees' Union, Lucknow, the Harness and Saddlery Factory Employees' Union, Cawnpore.

Jhansi has an important union of railwaymen, but it is a branch of the central union of the employees of the Great Indian Peninsula Railway at Bombay, and is not registered in the United Provinces.

For a great province of some industrial importance, the number of associations—registered and unregistered—is small. They are all of recent growth. The oldest is only about ten years old. Their inception was due to the economic unrest following

in the wake of the war. While prices had risen greatly, wages and salaries had lagged behind, with the result that there was severe economic distress. Considerable increases had to be made at this time in the salaries of the clerical and menial employees of the Government, and it was natural that industrial labour should combine in the attempt to improve its standards of remuneration. Cawnpore labour was the first to adopt some sort of organization; the railwaymen followed suit. Some of the associations born during the period of post-war travail, and especially during the non-co-operation days, when the province in common with the rest of India experienced a strike wave, have since become dead or moribund. Organized labour forms a very small proportion of the total. If railway employees be left out of consideration, the total membership is about 4,000, whereas the number of employees in factories (excluding railway factories) is a little under 70,000. Even in Cawnpore only about 10 per cent. of the labour is organized; outside Cawnpore organization is almost non-existent. With the exception of the Bengal and North-Western Railway system Indian labour is only nominally organized, as both the East Indian Railway unions are declining and one is even moribund.

But, broadly speaking, the realization by labour of its interest in combination is gradually growing, and with the progress of literacy and higher standards of intelligence and living a growth of trade unionism may be anticipated in the future. For the present, however, it is not an important factor in the industrial system of the province.

120. (a) The *Mazdoor Sabha* (labourers' association), Cawnpore, came into existence in 1919. The economic unrest of the post-war period among employees was responsible for its formation. It planned a big strike with the object of securing higher wages, bonus and other concessions, and was, to some extent, successful in achieving these aims. The exact number of members cannot be ascertained; it is however in the neighbourhood of 3,000. Its income is about Rs. 1,500 per annum. The annual subscription is 8 annas for members earning up to Rs. 30 per mensem and Re. 1 for those earning more. It was registered under the Trade Unions Act in 1928. In effect, though not in form, it is a loose federation.

For leadership the *sabha* has still to rely on outside assistance. Its president and secretary are both public workers active in provincial politics. Labour as such has no representation in the provincial Legislative Council, but the president of the *Mazdoor Sabha* represents a territorial constituency, and is thus in a position to ventilate labour grievances in the Council, and occasionally does so. Though the policy of both these office-bearers is stated to be the progressive association of genuine working men with the work of the *sabha*, it cannot yet be said that even a fair proportion of guidance and control is provided by labour itself.

The *sabha* maintains a dispensary in charge of a qualified medical graduate where medical treatment and medicines are both provided free. It also maintains a reading room and a periodical called *The Mazdoor* (workman).

As regards the attitude of employers the Upper India Chamber has not yet recognized the *sabha*. Among the constituent members of the chamber the only concern which recognizes the *sabha* officially is the Elgin Mills. But even though other concerns do not officially recognize it, there is at times correspondence between them and the *sabha*. The policy pursued in this respect is, however, neither uniform nor consistent. On the whole, it would be correct to say that while it has obtained some foothold, it has yet to obtain full recognition. When labour questions are considered, the *sabha* is sometimes invited by Government to express its opinion or to send a representative to serve on special committees.

(b) The Bengal and North-Western Railwaymen's Association was formed in 1920 in connection with the great strike of that year. It was registered in 1928. Employees of any department of that railway are eligible as members. During the year 1928-29 its membership rose from 5,942 to 7,502. It claims that not one member left the union during that year. Annual income and expenditure are about Rs. 1,300 to Rs. 1,400. On March 31st, 1929, it had a closing balance of Rs. 1,400.

The association claims that it has succeeded in bringing about an all-round increase of wages and even annual increments in the case of some classes of employees, and in securing the concession of an extra carriage for the use of workmen going home east of Gorakhpur on Sundays and holidays.

The union is recognized by the Bengal and North-Western Railway authorities, and this fact to a very large extent explains its popularity with railwaymen. The union realizes the value of the "recognition," and is said to try as far as possible to avoid clashes with the railway authorities. Unlike the other two railway unions, the policy and management of this association are largely controlled by the members, even though the president and secretary are both outsiders.



(c) The East Indian Railway Employees Union, Lucknow. The exigencies of a strike led to the formation of this union in 1921. After the amalgamation of the Oudh and Rohilkhand Railway with the East Indian Railway in 1925, the union shifted its office to a centre nearer Calcutta in 1927, and was replaced by the present union. It was registered in 1928. It at first included traffic men, but its membership is now confined to the employees of the workshops. At the time of registration it had a membership of nearly 3,800, which has now gone down to about 3,000.

The position of this union seems to have greatly declined. Last year no member paid his subscription. The rule that membership ceases if the subscription is not paid has not been enforced. A "general" meeting to settle this point has not yet been held. The union has about Rs. 4,000 in cash deposited with the chairman. Both he and the secretary are politicians and not railwaymen.

The union is not recognized by the railway authorities, and this fact goes far to explain the members' lack of interest in the union.

(d) The East Indian Railway Union, Moradabad. This association was formed in 1926 and was the first union in the province to get itself registered (November, 1927). Originally it was a branch of the Oudh and Rohilkhand Railwaymen's Union at Lucknow, but in July, 1926, it set itself up as an independent union under the chairmanship of Maulvi Muhammad Yaqub, M.L.A. (vice-president of the Legislative Assembly). Including clerks and the traffic staff the membership is now about 1,500. During the year 1928-29 the union's income and expenditure were about Rs. 2,200, and the closing balance was only Rs. 134.

The fact that it had over 3,000 members at the beginning of the year 1928 is significant. The large drop in membership is attributed by the management of the union to the alleged unsympathetic attitude of the railway authorities and their alleged desire to encourage *faidamand panchayats* at the expense of the union. As in the case of the other East Indian Railway Union the railway authorities do not recognize this union.

Apart from the chairman and the paid secretary the office bearers are railwaymen. The management is in their hands.

(e) The Press Employees Union, Allahabad, was registered in 1929. Other information about it is not available.

(f) The Jhansi branch of the Great Indian Peninsula Railway Union registered at Bombay has a membership of 1,090, mostly employees of the local Great Indian Peninsula Railway workshops.

119. *Nature of activities*—(i) *Employers' associations*.—The Upper India Chamber of Commerce was the first association of the kind to be formed in the province. It was registered in 1894. It is an influential body representing in the main European industrial and commercial interests. The United Provinces Chamber of Commerce is also an important body representing Indian interests. Both chambers are represented in the provincial Legislative Council, the former by two members and the latter by one. Both are represented on numerous other bodies, and are freely and frequently consulted by the local Government and the Department of Industries on a variety of economic questions. Apart from the Indian Sugar Producers' Association, Limited, Cawnpore, there is no organization of employers in a particular industry.

The objects of both the chambers are similar—the safeguarding and promoting of the interests of their members and helping in the development of the trade, commerce and industry of the province. The establishment and maintenance of uniformity in the rules and usages of trade, arbitration in the case of disputes arising out of commercial transactions, and the collection, compilation and dissemination of statistical and other information relating to industry and commerce are also among their stated objects. In practice organized representation and advice to Government, railways and public bodies on matters like trade and transport restrictions, railway freights, supply of wagons, tariffs in India and abroad, protection of industries, labour legislation, etc., have claimed the greater part of their attention. As examples of constructive work attempted may be cited the scheme to provide housing accommodation for the industrial labour of Cawnpore and a proposal (which however ultimately miscarried) to set up machinery for the settlement of trade disputes.

The Indian Sugar Producers' Association is interested in the development of the sugar trade and industry, but not much is known about its actual activities.

(ii) *Employees' associations*.—The only association which has so far taken up work outside the limited field of fighting for increased wages and similar concessions is the *masdoor sabha*. Its activities have been mentioned in para. (120), on page 187.

118. *Effect on industry and on the condition of workers generally.*—Within the limits which they have fixed for themselves, the chambers have attained a large measure of success. Numerous common grievances have been removed and many rights, benefits and concessions have been secured for the common good of the members and the general benefit of trade. They have built up for themselves an influence which secures a prompt hearing and earnest efforts to meet the wishes of the commercial and industrial interests—individual and corporate—which they represent. Through their representatives in the Provincial Council, the municipal board of Cawnpore, the Board of Industries and Industrial Loan Commissioners, various railway advisory committees, and numerous other bodies they are in a position to make their voice heard and their weight and influence felt. Though the policies and outlooks of the two chambers are not always identical, they often converge in the same direction. Their services to industry have been numerous. As examples might be cited the specially favourable railway freights which Cawnpore enjoys, the part of which the chambers took in the agitation for the removal of the excise duty on cotton goods made in the country, and the action taken by them for the supply of railway wagons for the transport of coal and other materials.

The effect of the organization of labour on industry has not so far been very marked, but it is reasonable to hold that it has to some extent helped labour to secure better wages and conditions of work and better treatment at the hands of the supervising staff. When, however, it grows more mature and establishes more points of contact with employers than exist at present, there appears to be no reason why it should not prove useful in a constructive sense, not only to labour but also to industry.

121. *Trade Union Act, 1926.*—As stated elsewhere only five unions have so far accepted registration. There are a number of unions, including one or two of some importance, which still go unregistered. The benefits conferred by the Act do not appeal to unions of recent origin. The substantial immunity from civil suits and criminal prosecution now enjoyed by registered unions under the Act was already enjoyed in practice though not by law. Though strikes and other disputes have been fairly numerous, no legal action against a union or its leaders is known to have been taken in this province. The protection of union funds from civil action for damages is a legal benefit of little practical value to unions with petty funds. From the figures given a little earlier it will be seen that none of the existing unions had or have much to fear on this score. The great inducement to the acceptance of registration was and is "recognition" by the employers. Its value is apparent from the contrast between the increasing membership of the Bengal and North-Western Railwaymen's Association which has been recognized by the railway authorities and the decadence which has reduced one of the two registered but unrecognized East Indian railway unions to a moribund condition, and is apparently fast reducing the other to the same level. The Government of India had felt and agreed that registration would facilitate recognition. In this important direction the unions feel keen disappointment. It can safely be asserted that the failure on the part of employers to recognize registered unions is seriously affecting the utility of the Act, and tends to cause unionism to grow up along unhealthy lines.

(ii) The unions which have accepted registration do not feel much the better for it except perhaps that the *Mazdoor Sabha*, Cawnpore, has been enabled thereby to secure a slender foothold from which it can fight for recognition by the chambers and by their constituent members. The Act is designed to benefit more mature unions than those which have so far been formed in this province.

On the other hand, the prescribed audit of the union accounts is bound, *ipso facto*, to prove beneficial. The Registrar of Trade Unions has not yet had sufficient time to judge the extent of such benefit.

(iii) The Government have not so far recommended any amendments.

## XV.—Industrial Disputes.

123. Since 1921, the province has had a little under four dozen strikes. It is possible that minor disputes have remained unrecorded, but so far as can be ascertained from special inquiries made, no important one has been omitted.

As was to be expected, the upsetting of the general mental balance during the non-co-operation days (1920–1921–1922) caused considerable labour unrest. But as regards labour disputes, the unrest was essentially economic. The prices of all the necessities of life (particularly food, drink and clothing) had risen abnormally,

while following the well-known economic law wages had lagged seriously behind. On the other hand industry was prosperous. The succeeding years have been witnessing a steady amelioration of the conditions of labour, not only as regards wages, hours and treatment in general, but also as regards its organization. An account of the important disputes since 1921 has been given below as evidence for the conclusions drawn later on.

*Important disputes, 1921.*—In 1921, there was an important strike in the railway workshops at Lucknow. About 5,000 men went on strike for the increase of their wages. The strike lasted two months and twenty days. As almost the whole labour force came out, the train service was dislocated and had to be seriously curtailed. Excitement ran high. At Gorakhpur there was a strike affecting about 500 men of the boiler and machine shops of the Bengal and North-Western Railway workshops. It lasted only a day but police assistance was needed. The alleged reason was an assault by a European foreman.

1922.—While 1921 saw five strikes, the succeeding year saw as many as eleven. The most important one was the East Indian Railwaymen's strike in February, 1922. It started from Tundla, where a European engine-driver was alleged to have assaulted an Indian fireman, and spread all over the line. To the grievance about the personal assault were tacked on other grievances about salaries, etc. It lasted 46 days and was ultimately settled with the assistance of Mr. C. F. Andrews, in whom both parties to the dispute had confidence. The men employed in the Rohilkhand and Kumaun Railway workshops near Bareilly demanded 50 per cent. increase of pay and fifteen days' leave on full pay per year. About 900 men were involved. The strike lasted twenty days but was peaceful. In the settlement they got a 10 per cent. increase of wages. About 3,500 men of the Victoria Mills, Cawnpore, remained on a four week's strike. The alleged grievance was that the payment of wages was delayed. The strike was peaceful and the men returned to work unconditionally. The Muir Mills, Cawnpore, had a strike lasting six days and involving 3,000 men. The alleged ground was the dismissal of a weaver. The strike witnessed a few scenes of rowdiness; some mistries were assaulted by the strikers, who, however, had to return unconditionally. At Agra there was a six day's strike over the bonus issue involving about 1,500 men of the cotton mills. The men's grievance was largely redressed, though not to the extent demanded by them.

1923.—1923 saw eight strikes, only two of which deserve notice. Over 3,000 men of the Bengal and North-Western Railway workshops at Gorakhpur struck work, the ground being alleged assaults by European and Anglo-Indian foremen. The strike lasted three days. The police had to be called up to clear the workshops. The demands were substantially conceded. In October, the New Victoria Mills, Cawnpore, had a strike lasting five days and involving 3,500 men, over the issue of a bonus and higher wages, but the men returned unconditionally. In December they demanded some control over management. The mills were locked out. After forty-five days the men had to return unconditionally to work.

1924.—At Cawnpore there was considerable labour unrest and agitation during the first three months of 1924, which culminated in the riots at the time of the strike in the Cawnpore Cotton Mills. The police had to fire. After remaining out for nineteen days the men (nearly 2,800) returned unconditionally to work.

1925.—Labour conditions in 1925 were more settled than in 1924. But two strikes were important, one in its results and the other intrinsically. About 800 employees of the paper mills at Lucknow—the only one in the province—went out on strike for an increase in their wages. Almost the whole labour force downed tools. But the mills dismissed the major portion of the men on strike and reinstated many of the dismissed men on reduced wages and found no great difficulty in securing substitutes—facts which proved that plenty of casual and out-of-employment labour was immediately available.

Gorakhpur, too, had a serious strike involving nearly 4,000 men and lasting seventeen days in the railway workshops of the Bengal and North-Western Railway. A reduction in staff on a scale not fancied by the men and complaint about assaults were the alleged causes. From the strikers' point of view the strike was a success, as all the men (including those brought under reduction) were reinstated.

1926.—In 1926 labour conditions were still better, the only noteworthy incident being a strike by the men employed in two of the cotton-spinning mills at Hathras for a month. The men's demand for a bonus was the cause. Eventually the demand was granted and the strikers went back.

1927.—The only industrial dispute of serious magnitude in Agra took place in 1927. About 3,000 men were involved. The cotton mills there were in financial trouble, and had to close down for a few days in October for the adjustment of

accounts. The mill hands suspected insolvency. Wages had not been paid for two months and arrears were naturally demanded. When these could not be paid at once the men went out on strike for over a month. A breach of the peace was apprehended, and armed guards were posted and other police arrangements were made. No serious trouble however occurred. The arrears were paid up, the mills closed down and the men returned home peacefully.

Hathras already had a strike in 1926. In 1927 there was another. It affected the same two mills and lasted eight days. The reason was an increase in the number of working hours. A settlement was amicably brought about.

Benares too had a strike in January, 1927. The men in all the departments of the cotton mill (about 900) downed tools demanding an increase of wages. The strike lasted only a day and work was resumed on the management promising an enquiry.

Another unimportant strike of about 500 men took place in the running sheds of the East Indian Railway, Lucknow, the ground being alleged harsh treatment by the foremen. Work was resumed the same day as a result of an amicable understanding. About three months later a serious strike lasting however only a few hours took place in the carriage and wagon workshops of the East Indian Railway at Lucknow. The alleged grievances were that a European foreman had kicked the dead body of a workman killed by a shunting accident, and that compensation was not paid in that and similar cases. The precise nature of the settlement is not known.

The most important strike in 1928, took place at Cawnpore towards the close of the year; it was really the culmination of a series of labour troubles at the Elgin Mills and the Cawnpore Textiles. Alleged petty assaults by the European staff of these cotton and hosiery mills under the management of a European firm and the unpopularity of the system of compelling workmen to buy a proportion of the cloth damaged in the process of manufacture were the causes. Trouble had already raised its head in March, but had come to an end with the management's promise to look into the complaints and to allow the mazdoor sabha (labour union) to represent the men. The men too promised not to go out on strike without notice. An alleged assault led to a strike in May in most of the departments; the rest were locked out. This strike lasted about three weeks and ultimately was settled with the help of the district authorities. The alleged assault became the subject of a regular complaint in a magisterial court, but the accused was discharged. The terms of settlement were the same as in March. Trouble, however, went on brewing and later on the alleged corruption on the part of mistries furnished an additional grievance. Short-lived, but sudden strikes took place in the cold weather and when one more took place in February, 1929, the management declared a lock-out. The mills remained closed for about a fortnight, and re-opened by departments. The men had to go back almost on the management's terms. This series of strikes was serious; in the case of the main mill, the situation was at one time even critical. But no collision actually occurred between the strikers and the police deputed to protect the mill property and to keep law and order in the vicinity. The strikers' attitude towards the police also changed when they saw that the superintendent of police was personally helping in the negotiations between the parties.

1929.—1929 has been comparatively quiet. The incidents of February at Cawnpore have already been narrated. About 650 men employed in the paper mills, Lucknow, struck work for a week, demanding the usual bonus and increased wages. The strike was, however, an ordinary affair and was amicably settled.

*Conclusions.*—A few conclusions about industrial disputes can safely be drawn from the above narration. Strikes and lock-outs have taken place, but both have been few and the latter very rare. The chief causes of disputes have been both economic (demand for increased wages, bonus, reduced hours of work, compensation for accidents, better leave and bonus rules, amelioration of the conditions of work, non-reduction of staff, reinstatement of reduced or discharged men, etc.), and non-economic (favouritism or victimization of particular men, alleged harsh treatment and assaults by foremen and officers who usually in the railways and in the important industrial concerns of Cawnpore are European or Anglo-Indian). As regards bonus, the title to it was often forfeited by a single day's absence. The practice in some cotton mills whereby workmen had (and have) to buy a portion of the goods damaged by them in the process of manufacture has always acted as an irritant. No dispute had, as its origin, a difference of opinion as regards the employers' liability to undertake measures for enabling labour to live a "better life" (e.g., sanitary housing, facilities for education and entertainments, medical treatment, provision of maternity benefits, creches, etc.). They were almost entirely confined to disputes over wages, bonus, certain simple privileges and complaints regarding favouritism, victimization, harsh

treatment and assaults. Every case involving an allegation of assault or severity on the part of a European or Anglo-Indian foreman or officer tended, and still tends, to take on a racial complexion and to make settlement *pro tanto* more difficult. The employers' refusal to recognize the claim of the leaders of a labour union to represent the men has—though rarely—been one of the causes leading to a strike or helping to prolong it. Strikes have been as common in the state workshops as elsewhere, perhaps even more so; such strikes have almost invariably taken an at least partly racial turn.

The actual upshot has varied; sometimes the men won their whole case, sometimes their return to work was on the employers' terms. Only in one case could the management dismiss a large number of the strikers without upsetting the programme or encountering any other serious difficulty. The existence of a good deal of casual labour and the lack of organization have handicapped the strikers. In a few cases the men had legitimate grievances and these were redressed. Labour still has to look to non-labour leaders for guidance and support. But the most important point that emerges is the generally peaceful character, and in the great majority of cases short duration, of the strikes. Though a breach of the peace was now and then apprehended, only one such breach did in fact occur.

(iv) No record is available assessing the real loss to industry and to the workers. As all the concerns affected by industrial disputes were not likely to remain fully occupied, an estimate of loss based on mere arithmetical calculations and leaving out an assessment of the extent to which the concerns could afford to remain closed for the whole or a part of the strike period, or the men utilized such time elsewhere, would only be of questionable value and has therefore not been attempted. On the other hand, a very rough estimate of the loss in wages (a rupee per day being taken as the average for all the men involved) has been given in the last column of the statement at the end of the chapter. But it is of little real value. It is doubtful if accurate and reliable information is available at all. When moving that the Trades Disputes Bill be taken into consideration, the Honourable Sir B. N. Mitra confined himself to the number of working days lost and wages relating to the Bombay mill strikes.

124. *Conciliation and Arbitration Machinery*—(i) *Results of previous investigations.*—In 1920 the Government of India invited the local governments' opinions on the advisability of introducing legislation on the lines of the Industrial Courts Act, 1919, to settle and to prevent industrial disputes. This Government consulted the two Chambers of Commerce, the Board of Industries and some public men. The opinion obtained was almost unanimous that labour was not properly organized and that therefore no useful purpose would be served by any legislation. The Upper India Chamber then approached this Government for steps being taken for the formation of a board to settle industrial disputes. Government referred the report of the Bengal Committee on Industrial Unrest to the Director and the Board of Industries for opinion. The Board in the main approved the report and thereupon Government formulated a scheme as below and communicated it to the Upper Indian Chamber :—

(a) The Chamber to recommend to its constituent members the proposal for joint works committees.

(b) A conciliation board to be tried at Cawnpore. Composition: twenty members (five from each of the two Chambers, and ten to represent the *mazdoor sabha*). Disputes to be referred to a panel from the board (viz., two members and a chairman) in case one or both parties approached the Director of Industries. Each party to select a member. In case the parties could not agree about the chairman, the Director to appoint one. But in public utility services the Director to have the power to appoint a panel *suo motu*.

The Chamber did not agree. Its contention was that the *mazdoor sabha* was not truly representative of labour and that it was entitled to larger representation than the United Provinces Chamber. The Government offered to consider any scheme which the Chamber might put forward. But the Chamber gave up the proposal on the ground that the proper representation of labour could not be secured. Even as regards joint works committees, its view was that they had been tried and had failed. The entire question was dropped at this stage.

Nothing in this direction was attempted till in 1924 the Government of India addressed this Government on the desirability of legislation for settling labour disputes. This proposal eventually matured into the Trades Disputes Act, 1929.

(ii) *Part played by official or non-official conciliators in the settlement of disputes.*—Public-spirited, non-official gentlemen interested in labour questions are still few and far between. Official prestige is still great. It is therefore only natural that the part played by outsiders in the settlement of disputes has in many cases been

confined to official conciliators—usually the district magistrate or a member of his staff and now and then police officers. Thus the strike in the Agra United Mills (March, 1927) was settled on the very first day by the intervention of the *kotwal* of Agra (an officer of the Police Department in immediate charge of police work in the city). The strike (May, 1928) at the Elgin Mills, Cawnpore, was, after running for nearly three weeks, settled through the agency of the district magistrate. On his advice a conciliation board was set up *ad hoc* under his own chairmanship and settled the dispute. The part played by the Superintendent of Police, Cawnpore, in helping negotiations between the Elgin and the Cawnpore Textile Mills and the strikers, and the manner in which the strikers' attitude towards the police changed as a consequence of their realization of what he was doing for them have already been mentioned. The strike at the Clutterbuckganj Saw Mills was ended as a result of the District Magistrate of Bareilly's intervention. Instances can be multiplied, but these serve to show the prestige of officials and their capacity and willingness to intervene with good effect. Speaking broadly, however, their rôle has been confined to the maintenance of law and order.

Effective intervention by non-official gentlemen has been rare. The most noteworthy instance is the successful attempt of Sir A. Chaudhri and Mr. C. F. Andrews to bring about a settlement of the great East Indian Railway strike (1922). Mr. Andrews worked in this province and collaborated with the Agent in the investigation of the alleged grievances. He enjoyed the confidence of both the parties. When a riot took place and firing had to be resorted to by the police in connection with the serious strike at the Cawnpore Cotton Mills (1924), the president of the *mazdoor sabha* was approached by the district magistrate and the mill authorities. But the magistrate reported that the president's efforts were of little avail and that the men were beyond his control. Again, in connection with the Elgin Mills strike (May, 1928), the leaders of the *mazdoor sabha* (especially the president) assisted the District Magistrate of Cawnpore to bring about an amicable settlement.

(iii) *Use (if any) made of Employers' and Workmen's Disputes Act, 1860.*—So far as can be ascertained, this Act has never been used.

(iv) *Joint standing machinery for the regulation of relations between employers and workpeople.*—At this Government's suggestion, some of the constituent members of the Upper India Chamber of Commerce gave a trial to joint works committees, but the ultimate view of the Chamber was that the experiment was a failure. The experiment has not, so far as can be ascertained, been revived.

The East Indian Railway authorities have tried to encourage "welfare committees" and *faidamand panchayats* (beneficial committees), but these are confined to general welfare (health, hygiene, education, etc.), and have not attempted to take the place of joint works committees. Matters relating to wages and the rights of labour have now and then been discussed, but the committees are advisory and their proposals are not binding on the authorities.

(v) *Opportunity afforded to workpeople of making representations.*—There is a general complaint that there is little direct and personal touch between the management and the workpeople, and it is alleged that things used to be different some years ago. As there are no joint works committees and as even the registered unions have, except in one case, not been recognized by the employers, opportunities for making representations are somewhat meagre. Every mill at Cawnpore keeps a petition box, into which written representations intended for the manager can be dropped. Besides, there is the usual "regular channel" through which petitions can be submitted. In exceptional cases the petitioner or complainant is permitted to have a personal interview with the manager. Though the *mazdoor sabha* is not an officially recognized body, it is not unusual for representations to be made through the *sabha*. The management sometimes take action on such representations, but no uniform and invariable policy is followed.

In the state railways every worker in receipt of a monthly wage is a state servant and enjoys the usual rights attaching to state service. The medium of the unions (which though registered are not recognized) is occasionally utilized, especially by men who have been punished or discharged. Representations received through the *faidamand panchayats* have a better chance of success, but these bodies have lacked the vitality of a genuine movement rooted deep in the workmen's consciousness of their interests as a class and their own efforts to safeguard them.

125. *Trades Disputes Act, 1929.*—This Act has not yet been made use of in this province and no rules under the Act have as yet been notified by this Government. It is too early yet to judge how far it will lessen the number of industrial disputes and mitigate their effects.

### XVI.—Law of Master and Servant.

127. *Effect of the repeal of the Workmen's Breach of Contract Act.*—No serious handicap to employers has come to this Government's notice. Complaints have very occasionally been made by contractors who have to import labour from a distance, but for various reasons they have been rare. The employment of long distance labour is unusual and is now avoided as far as possible. It is generally confined to skilled workmen, normally men of some status and substance. Again, the bigger contractors can and do often give out sub-contracts to men whose control over the workmen so engaged is close and sometimes personal. Hence, no serious cases of dishonest practices have come to this Government's notice. A very important firm of building contractors of Lucknow stated that they have experienced no serious difficulty since the Act was repealed.

128 *Types of Contracts commonly in use*—(i) *in factories.*—Many factories have their own rules and in some cases the employees have to sign an agreement promising to abide by them. The rules are supposed to be explained to them, and in some factories the printed rules are put up at the gate and in each section of the factory. The rules generally relate to hours of work, time of commencement of work, absence with or without leave, the award of bonus, due notice of resignation or cessation of work, including strikes, fines for bad work or misconduct, withholding of some portion of the wages earned, an undertaking to vacate the quarters provided by the employers when the employment ceases, etc. The written contract is usually a printed document in book form with a counterfoil. One part is kept by the employee and the other by the employer. When no formal contract is executed, the employees are supposed to be bound by the verbal contract to abide by the rules. For highly skilled employees recruited in Europe, or even in India, a regular covenant is drawn up and signed by both parties. The employers bind themselves to pay them the wages agreed upon and to continue to keep them in employment for a fixed period unless there is fraud or misconduct proved in court. They sometimes also provide for other facilities, such as a free house, free medical treatment, and in the case of Europeans free return passages. The employees, on the other hand, bind themselves to work for the employer for a fixed period on fixed wages. Usually heavy penalties are provided for leaving before the expiry of the stipulated period.

(ii) *In other industries, especially in the building trade, railway works, etc.*—Contractors sometimes have to import skilled labour from some distance. Prior to the repeal of the Workmen's Breach of Contract Act they used to engage skilled workmen (e.g., stone-cutters and masons) under the Act and used to give them advances to enable them to leave home. Documentary evidence of the payment of an advance used to be secured. The workmen were liable to criminal prosecution for default. Since the repeal of this Act, the large contractors try to avoid giving advances to workmen, or even entering into civil contracts with them. As explained above, recruitment is often left to sub-contractors. Even when the sub-contractor has to make an advance, the extent and nature of his control are such that he manages to recover it. Occasionally the contract including the penalty thereunder is enforced, particularly if the workman has left before his time and taken service under a rival.

129. *Extent to which the civil and the criminal law are available and are used for enforcement.*—Apart from the cases which amount to offences like cheating, the criminal law is no longer available for the enforcement of such contracts. In fact the underlying idea of the repealing legislation of 1924 was to confine the liability of workmen in respect of such contracts to that at civil law, and thus to bring the Indian law on the subject on a par with the corresponding law in other civilized countries. No action under the criminal law has come to this Government's notice, and it is believed that it has rarely been taken if at all.

Recourse to the civil law undoubtedly presents difficulties, mainly in connection with the execution of decrees. In the case of men imported or to be imported from distant places the difficulties are greater still. A few of the reasons which in actual practice reduce the difficulties of the employers have been stated above. No statistical information on the subject is available. But it is believed that very little litigation of this nature (if any at all) has occurred, even though it is not unlikely that a fair number of breaches of such contracts by the workmen have taken place. A very important firm of building contractors who have been working at Lucknow since 1922 have reported that they have had no occasion to file any suit even though they have employed Chinese carpenters, Benares stone-cutters and other specially imported skilled workmen.

Civil suits by workmen for the recovery of their wages have here and there been filed, but the number of such cases is believed to be negligible. The *masdoor sabha* claims that in two cases it threatened civil suits against a cotton mill at Cawnpore

which had refused to pay wages on the ground that under the mill rules the entire month's salary was to be forfeited if a workman remained absent for four or more days, and that the threat was successful.

132. *Employers' and Workmen's (Disputes) Act, 1860.*—So far as this Government are aware, the Act was rarely, if ever, utilized in the past, and is now a dead letter.

## XVII.—Administration.

133. *Provincial legislature's action and attitude*—Neither labour in general nor factory labour as such has any special representation in the Legislative Council of the United Provinces. Representations were received urging that as the two Chambers of Commerce between them have the right of electing three out of the hundred elected members, labour, too, should be given some special representation. The Reforms Inquiry Committee recommended in 1925 that special elective representation should be given to labour in India, though the committee added that in the existing circumstances local governments might be compelled to provide for it by nomination. When this recommendation was referred to the United Provinces Government, they informed the Government of India that public opinion in the matter was lukewarm, and was confined almost entirely to the politically minded classes. Even in Cawnpore labour was said to be apathetic. The Government said they were satisfied that the practical difficulties of creating such electorates were insuperable, and they adhered to their view previously expressed that there was no need to give separate representation to the labouring classes.

The provincial Legislative Council has evinced little interest in questions relating to industrial labour. No legislation has been undertaken. References to the problems of such labour in the budget debates are few.

No resolution specifically raising an industrial labour issue has been adopted.

Such interest as has been evinced has taken the form of occasional questions; even this has been confined to very few members. Since the election of the present president of the *Mazdoor Sabha* to the Council by a general constituency such questions have been a little more frequent. To give a few examples: one set of questions inquired about the number of accidents in factories, factory inspections, employment of women and whether Government contemplated the appointment of a factory inspectress; another group inquired about the numbers of factories, factory operatives, and of women and children employed, and about exemptions from the operation of the Act, etc.; a third set referred to the increasing number of accidents in the factories and inquired what steps Government intended to take in order to reduce fatal and serious ones. The number of unions, the number of working hours, welfare work affecting labour, the representation of labour and the provision of education for the children of the millworkers formed the subject-matter of a few questions. A specific grievance was occasionally ventilated, e.g., the rule alleged to be in force in two cotton mills about the forfeiture of wages and discharge as the result of four days' continuous absence, or the alleged heavy incidence of tuberculosis among glass-blowers, or the employment of police in connection with labour troubles. While these questions cover extensive ground, they do not appear to be part of a systematic and organized plan to ventilate labour grievances or arouse widespread interest in them.

135. *Relations between the Central and the United Provinces Government.*—While differences of opinion have occasionally occurred, they have been confined, in the main, to matters of detail. This Government have usually advised caution in the handling of labour questions. This is particularly true of their attitude towards the proposals to legislate about trade unions, trade disputes, and workmen's compensation.

136. *Administrative authorities.*—The following industrial matters are classified as provincial subjects, subject, in the case of heads (a), (b), (c), (d) and (g), to legislation by the Central Legislature:—

- (a) Factories.
- (b) Settlement of labour disputes.
- (c) Electricity.
- (d) Boilers.
- (e) Gas.
- (f) Smoke nuisances.
- (g) The welfare of labour, including provident funds, industrial insurance (general health and accident), and housing.

These subjects are all reserved, and in this province form part of the portfolio of the Home Member, with the exception of (c) electricity, which is in charge of the Finance Member. The development of industries, including industrial research and



technical education, is, however, a transferred subject, and forms part of the portfolio of the Minister of Education and Industries. Public Health and local self-government come under the Minister for Local Self-Government. Medical administration is also a transferred subject and comes under the Minister for Agriculture. Funds for the factory and boiler inspection staff are provided under head 37—miscellaneous departments. They amounted in the current year to Rs. 24,300 for the inspector of factories and Rs. 41,817 for the boiler inspection staff. The estimated income under this head was Rs. 60,000.

The sole agency in the province for the administration of the Indian Factories Act and the Indian Boilers Act is the Chief Inspector of Factories and Boilers. He has three assistants, but their primary duty is the inspection of boilers. They have little time to devote to their additional duty of factory inspection. The major part of the work of inspection of factories is done by the Chief Inspector himself. An assistant inspector of factories has been selected and will take up his duties shortly. A proposal to appoint an inspectress in Cawnpore was considered, but as women operatives are a small proportion of the total (between 7 and 8 per cent.) and the need for an assistant inspector was so much greater than that for an inspectress, the proposal to appoint an assistant inspector was given priority.

The factory inspection staff works under the control of the Director of Industries. The annual report and references to or from the Government are submitted or received through the Director. Control over technical matters relating to boilers is exercised by the Public Works Department and the annual report on the working of the Boilers Act is submitted to that department. In administrative matters the control is exercised by the Director of Industries.

Under Section 4(3) every district magistrate is a factory inspector *ex officio*. All officers of the Indian and the Provincial Civil Services holding charge of subdivisions of districts and all joint magistrates and deputy collectors with seven years' service are, *ex officio*, additional inspectors within the local limits of their jurisdiction for the purposes of Sections 21 to 28, 31 and 34 to 36 of the Act, and are empowered to institute prosecutions with the previous sanction of the District Magistrate of the district concerned.

In addition to the above, the three assistant directors of public health, twenty-four municipal and eighteen district medical officers of health, sixteen civil surgeons and one other medical officer are *ex officio* additional inspectors for the purposes of Sections 9 to 17, 19-A, 19-B, 20 to 28, 35 and 36. But they submit their reports to the Chief Inspector who passes the final orders.

The Workmen's Compensation Act is administered by district magistrates who are *ex officio* Commissioners under the Act. There is no Special Commissioner in the province. The annual report is compiled and submitted by the Director of Industries. The Registrar of Co-operative Societies is *ex officio* the registrar of trade unions, and of companies, which includes employers' associations. The staff of the public health and of the medical departments look after the health and the medical treatment of labour, but have few specific portions of the law to administer. District magistrates receive reports of fatal and serious accidents, and are charged with certain reporting duties when industrial disputes occur. Local boards can, within limits prescribed by the law, make bye-laws regulating the construction and working of factories.

A good deal is done direct by the local government. The setting up of a court of inquiry or board of conciliation (under the Trades Disputes Act) and the granting of certain important exemptions from the operation of specified sections of the Factories Act are among the powers exercised by the local government direct.

138. *Acquaintance of workpeople with factory legislation.*—It has already been stated that a very great majority of workpeople are altogether illiterate. Their interest in industrial employment is not permanent. Their organizations are few and are understaffed and ill-equipped. Little attempt has been made to educate them in their rights and duties under the law. When a labour dispute is brewing meetings are very frequently addressed by speakers, but the appeal is oftener to the emotions than to reason or argument. Such little educative work as is done on such occasions is not followed up with a sustained and systematic plan of training the men up to a fair degree of acquaintance with the law. The result is that very few workpeople possess even an elementary knowledge of the factory law and rules. In the course of his visits and inspections the Chief Inspector of Factories finds few workmen who even know the daily and weekly limits of working hours.

139. *Factory inspection.*—(i) *adequacy of staff.*—The staff available for the inspection of factories has been described in 136. Although the list of inspectors

*ex officio* looks formidable, such inspectors do not find it easy to devote much time to the work of factory inspection. The statement below shows the work done by each group in 1926, 1927 and 1928 :—

Year.	Chief Inspector.	His staff.	Magistrates.	Health officers.	Civil surgeons.	Total inspections.
1926 ..	410	150	55	21	—	636
1927 ..	288	115	46	43	10	502
1928 ..	337	183	56	30	*6	612

\* All the six were by one civil surgeon.

(ii) *Uniformity of administration in different provinces.*—The Factories Act applies to the whole of British India. The rules made by local Governments do not, so far as this Government are aware, materially differ. It is believed that there is not complete uniformity about the appointment of inspectors *ex officio*. Unlike some other provinces, this province has a combined inspectorate for factories and boilers. This arrangement has been found economical, and no difficulty has been experienced apart from that due to the smallness of the staff.

(iii) *Rigour and efficiency of administration.*—This Government have had no reason to hold that the administration of the law relating to factories has not, subject to the limits imposed by the size of the staff, been as efficient as could reasonably be expected. The inspection of seasonal factories especially in outlying places not easy of access has not come up to a high standard, but this was inevitable as long as the Chief Inspector of Factories was practically the only officer available for inspection duty. With the appointment of an additional inspector of factories the frequency and number of inspections are expected to improve.

It is possible that the interest of the *ex officio* inspectors could be stimulated, but the officers concerned find the work technical and uncongenial, and do not always have time to spare for such extra duties.

(iv) *Prosecutions and their result.*—Part A of the statement at the end of this chapter shows the number of prosecutions during the last five years for various breaches of the law and the rules.

The employment of workmen outside the fixed hours of work, or for longer periods than the daily maximum permitted by the Act, or of uncertified children or of women before or after the hours permitted by the law, and failure to provide adequate fencing and guarding of machinery and to keep the premises sanitary were among the most important breaches of the law leading to prosecutions.

The number of prosecutions instituted by or on the reports of inspectors other than the departmental staff used to be a fair proportion of the total, but in 1928 a very large proportion was due to the vigorous inspections made by the departmental staff (*vide* part B of the statement).

The number of prosecutions and the proportion of successful ones have, in this Government's opinion, been sufficient, but in the opinion of the Director of Industries and the Chief Inspector of Factories there has been a tendency to impose punishments insufficient to insure respect for the law. In 1925 Government issued a circular inviting attention to the matter, but little appreciable improvement is said to have resulted. In 1928 the fines imposed ranged from Rs. 2 to Rs. 125, the average being about Rs. 30. In the preceding year they ranged from Rs. 5 to Rs. 200, the average being Rs. 80. The maximum penalty allowed by the Act is in almost every case Rs. 500.

142. *Plantations and other industrial establishments.*—There are no plantations in the strict sense. The tea gardens, fruit orchards and sugar cane farms and cottage industries are not subjected to special inspections. No special staff is maintained for their supervision. Inquiries and investigations are taken up *ad hoc* if and when necessary either by the general administration staff or the staff of the department or departments concerned. Thus the incidence of tuberculosis among the glass-blowers of Firozabad, the conditions of work of boys and girls in carpet factories and similar specific problems were recently the subject of inquiry, but not as part of a regular administrative system.

*Note on boiler inspection (by the Chief Inspector of Factories and Boilers).—*In Great Britain the agency for the inspection of boilers is provided by the insurance companies, but in India as in some European countries and Australia, the duty of inspection is undertaken by Government, through a special boilers inspectorate. The reason is the absence of adequate insurance facilities. The tradition of the country is also in favour of the Government undertaking such work.

Every boiler has to be registered before it can be used. The registration is preceded by a thorough examination of the boiler, and of its mountings, fittings and steam pipes, to determine the safe working pressure by hydraulic and steam tests. Inspection is repeated every year and tests are repeated periodically whenever the inspector considers them necessary. A boiler is not permitted to be used unless a certificate or provisional order has been issued after such annual examination.

The inspection of boilers is done primarily in the interest of the safety of the employees, but in a country like India, where the very real danger arising from the use of high pressure vessels is not sufficiently realized, it is also of great benefit to boiler owners. Of late years the benefits of the periodical inspection and the technical advice given by the inspectorate in connection with the safe working of boilers has been more appreciated by owners.

The cost of carrying out boiler inspection, unlike that of factory inspection, is met by the owners, fees being levied in accordance with a schedule based on the heating surface of the boiler. The payment of this fee which ranges from Rs. 20 to Rs. 80 per boiler, amounts in effect to an insurance premium against accidents and is probably lower than it would be if the work were done by private agency.

*Statements of Offences and of Prosecutions.*

*A.—Prosecutions.*

For breach of	1926.	1927.	1928.	Remarks.
Section 9 ..	—	—	5	Premises kept insanitary.
„ 13 ..	—	—	1	Failure to provide latrine accommodation.
„ 18 ..	—	—	6	Failure to fence or guard machinery.
„ 21 ..	—	—	1	Employing persons during the rest interval.
„ 22 ..	—	1	—	Employing persons on a Sunday.
„ 23 ..	3	—	4	Employing uncertified persons and employing them beyond the permitted hours.
„ 24 ..	—	1	2	Employing women before or after the time allowed.
„ 26 ..	—	5	23	Employing persons outside the fixed working hours.
„ 28 ..	—	1	13	Employing persons more than eleven hours.
„ 31 ..	1	—	—	For non-payment of overtime wages.
„ 33 ..	—	1	—	For not sending a notice of occupation.
„ 35 ..	—	1	3	For not maintaining the prescribed attendance register.
„ 36 ..	—	—	2	For not affixing the abstracts of Act and Rules and notice of working hours.
Rule 4 ..	—	—	2	For not maintaining an inspection book.
„ 24 ..	—	—	2	For not providing receptacles in latrines and failing to keep them in a sanitary condition.
„ 34 ..	—	1	1	} For not fencing and guarding machinery as required by these rules.
„ 35 ..	—	1	—	
„ 37 ..	—	1	—	
„ 41 ..	2	1	—	} For not keeping the attendance register up to date.
„ 57 ..	—	1	—	
„ 72 ..	—	1	—	For not reporting a serious accident to the district magistrate.
Total ..	6	16	65	
Acquittals ..	1	1	4	

## B.—Prosecutions and Prosecuting Agency.

Year.	Number of prosecutions instituted by—	
	Chief Inspector of Factories and staff.	District Magistrates
1926 .. .. .	3	3
1927 .. .. .	6	4
1928 .. .. .	39	5

## XVIII.—Intelligence.

143. *Existing Statistics*—(i) *Extent and use of existing statistical and other information*.—This province has no labour bureau. References relating to industrial labour are, in the main, passed on to the Director of Industries. His office is not, however, designed or equipped for dealing adequately with such references. The Chief Inspector of Boilers and Factories' office has been understaffed.

The Director of Industries is not the registrar of companies or of trade unions ; this work is done by the Registrar of Co-operative Societies. The Director of Land Records is the Superintendent of Emigration, and as such collects some statistics about the migration of labour ; this is, however, confined to emigration to Assam. The wages census is undertaken by him.

The preparation of this memorandum has naturally suffered from the lack of a unitary trained and experienced officer familiar with the details of labour problems.

Such statistical and other information as is available is scattered ; there is no single book of reference or series of correlated books relating to labour employed in industries or on plantations. Apart from the bulletins published by the Government of India and the Bombay Government there is no organic connection between the existing sources of information ; they are not the work of one office or a number of offices working in close co-ordination. Speaking broadly, there is behind them no organized plan for unifying or correlating the entire work.

The decennial census (the last was undertaken in 1921) gives information about numbers, sex, occupations, territorial distribution, migration, etc. Along with the last two decennial censuses (1911 and 1921) industrial censuses were also taken. These give information as to the number of factories of each kind and the average daily number of persons employed in them and other miscellaneous matters. But the census is not undertaken primarily for this purpose and the information is, therefore, not detailed nor exhaustive nor even systematic. A good deal of the information about industry and labour contained therein is repeated in a more systematic and detailed form in the annual reports on the working of factories in the province.

A scheme for a census of industrial wages to be taken along with the regular census was considered but was not carried through. The last wages census undertaken in 1928 by the Department of Land Records confined itself to agricultural and semi-skilled labour (carpenters and smiths) in the rural areas. The reason for departing from the previous practice of including a census of urban wages for four or five selected types of industrial labour in seven selected industrial towns was that owing to substantial industrial development statistics so narrow in scope could give no accurate idea of the movement of industrial wages.

An inquiry was, however, made at the 1921 census into the housing conditions of four cities (Cawnpore, Lucknow, Benares and Allahabad). The results of the inquiry have been utilized in connection with Chapter III.

The Director of Industries submits annually some statistics (capital, production, number of employees) relating to labour in cotton, woollen and jute mills, paper mills, and large industrial establishments. In the case of cotton and jute mills, further details relating to men, women and children are furnished.

(*Note*.—Large industrial establishments include cotton, silk, woollen and jute spinning and weaving mills, cotton ginning and baling factories, jute presses, railway and tramway workshops, paper mills, printing presses, ordnance factories, stone dressing factories, tanneries and leather works, sugar, oil, tobacco, rice, flour, and saw mills, etc.)

The same officer also submits annual statements (which contain information regarding the average number of persons employed) relating to the tea industry and to the production of minerals in mines not under the Mines Act. The former classifies workers as " garden labour " and as " outside (permanent and temporary) labour," and is submitted to the Director of Statistics. The latter gives details about workers classified as men, women and children.

Then there is the annual report on the working of the factories under the Indian Factories Act. In respect of " factory " labour, this report gives varied and valuable information, e.g., the district-wise number of factories as defined in Sections 3 (a) and of factories notified under Section 3 (b); an elaborate district-wise classification of factories, both Government owned and private, the average daily number of persons employed in each industry (district-wise) the classification being the same as in respect of the number of factories, the average daily number of persons (men, women, boys and girls) employed in all industries and in cotton spinning and weaving and jute mills, and statements relating to intervals, holidays and hours (including various exemptions), accidents, convictions under the Act and inspections by the factories inspection staff.

The letterpress of this report contains the chief inspector's comments on the growth or decline of factories and of the labour employed in them, the employment of women and children, sanitary arrangements, fencing, accidents, ventilation, lighting and water supply, health, housing, hours of work, welfare work, wages for unskilled and certain forms of skilled labour, strikes and lock-outs, industrial unrest, prosecutions and miscellaneous information. But the report is written from the point of view of the Factories Act and the duties of the factories inspectorate rather than from that of the general conditions of industrial labour. Hence it does not go into details respecting the problems of labour as such. All the same it is at present the most useful annual report for a broad study of factory labour questions from year to year.

The annual report of the Chief Inspector of Mines is more elaborate but it is of little use to the United Provinces.

Then there are the annual reports of the Registrar of Trade Unions (under the Trade Unions Act) and of the Superintendent of Emigration. The former deals with the membership, etc., of registered unions; the latter is confined to the emigration of labour, mostly to Assam.

Vital statistics are made available in the annual reports of the Inspector-General of Civil Hospitals, the Director of Public Health, and the reports of special bodies like the Dufferin Fund, Lady Chelmsford Maternity and Child Welfare League, and others. The report of the Public Health Commissioner with the Government of India is based mostly on provincial reports.

The statistical abstract for British India furnishes information in a compact and systematic form.

The reports of welfare work done and housing provided by the British India Corporation, Cawnpore, throws valuable light on some of the problems vitally affecting industrial labour in that city.

The most important subject on which the present statistical information is very meagre is wages. The annual issues of " Prices and Wages " used to contain information on wages, but the publication has been discontinued. The provincial wage census (up to the one which was taken in 1916) used to contain information about industrial wages for four or five types of industrial labour in seven selected industrial towns. But this was omitted from the last census (1928). The information about wages in the annual report on the working of factories is far too meagre; it covers only about two-thirds of an octavo page. This is a matter on which employers are not disposed to give information freely. *En passant* it should be mentioned that Mr. K. L. Datta's well-known inquiry and report on the rise of prices in India (which gives some useful wage statistics) is now altogether out of date. No inquiry about wages and hours of work such as Mr. Findlay Shirras undertook in respect of the cotton mill industry of Bombay has been attempted in the United Provinces.

(ii) *Method of collection, and* (iii) *Degree of accuracy.*—The decennial census is an elaborate undertaking in charge of a special whole-time officer. Apart from the limitations due to the necessity of having to employ semi-literate enumerators in the rural areas (though the quality is higher in the towns), there is every reason to believe that such data as are collected are fairly accurate, particularly in respect of matters not needing elaborate and difficult distinctions.

The method followed by the wage census is similar though far less elaborate. On the other hand the main agency employed—viz., the highly-trained land revenue staff called *quanungos*—ensures greater accuracy.

The annual departmental reports are based on information collected by, or supplied to, fairly trained and experienced officers. The law lays obligations on various persons to supply the prescribed information, often on prescribed forms. But the lowest ranks of the collecting agency (e.g., the village police officials in respect of vital statistics) are often altogether illiterate. Their work is not adequately supervised. Hence vital statistics are not really reliable though they are valuable for comparisons between one year and another. When information is supplied by interested parties (e.g., managers of factories) it tends to be unreliable; no supervision is exercised and no verification takes place. Where, however, the statistics are collected by a trained and experienced staff, the degree of accuracy is naturally much greater.

The important point to note is that for the collection of labour statistics no particular department of Government is responsible. The second conference of the directors of industries of the various provinces (November, 1920, bulletin No. 5, of Indian Industries and Labour, pages 58 to 62) was of opinion that each province should set up machinery for the collection of labour intelligence and statistics, but no action in this direction has so far been taken in the United Provinces.

141. *Possibility of improvement.*—There are both scope and need for the improvement of labour statistics. The chief stumbling block that stands in the way of such improvement in respect of vital statistics in the rural areas, viz., the incompetence of the lower rungs of the reporting or collecting agency does not operate in the case of industrial labour. The employers' offices are, broadly speaking, capable of handling the necessary returns and statements. The problem is rather one of getting them to disclose information than of the competence of their clerical establishments.

The most important subject on which information should be collected is that of wages—both nominal and real—for factory labour and selected types of non-factory labour. The next most important direction in which improvement is possible is the subject of hours of work.

The method and agency of collection cannot be ignored. Uniformity is very desirable. The staff should be capable of appreciating the purpose for which the information is collected, and should be selected for their competence and efficiency in the handling of statistics.

145. *Nature of special investigations conducted.*—In 1921 the Government of India asked the local governments whether they agreed to the compilation of a "cost of living" index and could make arrangements for collecting "family budgets." Opinion was invited and on the whole was in favour of compiling the index. An officer was placed on special duty. With great difficulty figures were collected, but on scrutiny only 490 budgets were found to be fairly reliable. They were then analysed; meat-eaters were separated from vegetarians and each class was divided into "families" and "single men." A table was prepared, but the special officer said it was "necessary to emphasize the warning that for various reasons the table should be taken rather as an illustration than as an accurate index number." Meanwhile the Government of India had abandoned the idea of publishing an all-India index number and suggested that the provinces should publish their own index numbers. The special officer's report was however submitted to the Government of India. No further action was taken. The province does not publish or prepare an index number.

Meanwhile the Government of India intimated that it was proposed to make an inquiry into wages in certain industries. They sent down certain forms which were sent on to certain employers. When received back these were returned to the Government of India. No record of them is available in the Director of Industries' office. No systematic plan for regularly obtaining wage statistics was evolved.

\* The same officer on special duty also made an inquiry into the system of collecting statistics relating to prices, i.e., "the reporting agency, the selection of markets, the commodities reported and arrangements for check and scrutiny." He selected the commodities commonly used by labourers, and his report was, to this extent, a special inquiry concerning industrial labour. As, however, the compilation of a regular periodical index number was not undertaken, this inquiry did not lead to any appreciable result. The prices of food grains are still collected by district officers and are published in the Government's weekly gazette. Representations about an increase of salaries or wages are sometimes based on them.

The same officer undertook in 1921-22 for the benefit of the Indian Fiscal Commission a special investigation into the details of "clothing and bedding" used by the family of an average lower grade mill worker. His conclusion was that the average monthly expenditure on clothes amounted to Rs. 2 and on bedding to Re. 1. (These figures are of course altogether out of date now.)

Non-official researchers have undertaken special investigations, especially into the problems of recruitment, unemployment, housing, accidents, welfare and wages. But they are not the result of an organized plan. The inquiries are disjointed and spasmodic. Nor can the statistics collected or accepted by them be regarded as trustworthy. The difficulty experienced even by the staff of the department of industries and the factories inspectorate show that the difficulty of non-official workers must be still greater and their data and conclusions *pro tanto* less dependable.

146. *Future Developments necessary.*—The directions in which the collection, compilation and presentation of statistical and other information relating to labour might be improved have already been indicated. A proposal to establish a provincial labour bureau was considered in 1921 and dropped for financial reasons. The scheme has not since been revived.

## APPENDIX I.

### *A Note on Caste in Relation to Labour in Industries and on the Plantations.*

The broad features of this question have been discussed in para. 15 of the introductory chapter, a little more detail is given in this note.

In cottage industries caste is still somewhat rigid. It is exceptional to come across a man taking up work which traditionally is the appropriate vocation of a caste other than the one of which he is a member. Weaving is almost entirely confined to julahas who are Muhammadans and koris who are Hindus. Tanning is the hereditary vocation of chamars. The thathera caste supplies most of the metal workers, but in Moradabad Muhammadans form a large proportion of the artisans engaged in the artistic brassware industry. Pottery making is the caste vocation of kumhars and calico-printing and dyeing that of chhipis and rangrezes. The names of all these and many other castes are themselves vocational in origin.

But in industries organized on factory lines caste has never been so rigidly observed. In the early days of factory industry the operatives inside the factory were largely men of the lower castes including the lower classes among Muhammadans. But the distinction has been gradually disappearing. Away from their villages higher caste men found the attraction of higher wages strong enough to overcome their prejudice against work involving manual labour and association at work with workmen of the lower castes. An analysis of the structure of the labour force of a mill at Cawnpore from the point of view of castes shows that 41 Hindu castes besides Muhammadans, Sikhs and Christians contributed to its labour force. Mr. Fremantle of the Indian Civil Service who studied this problem expressed his opinion in 1906 as below :—

“There is no prejudice against mill labour even among the highest castes. Further, caste has no influence whatever on wages nor on the class of work in the mill performed by each man. Brahmans and chhatris work cheek by jowl with chamars and do not find their touch pollution as they would in their villages . . . The managers whom I have consulted on the subject agree that no particular class is more efficient than another, with the general exception that Musalmans are more thorough and industrious workers than Hindus, but as they are more difficult to control, many managers prefer the latter.”

But certain castes still take more kindly to factory work than others, chamars, kahars, ahirs, lohars, koris, brahmans, rajputs, lodhas, kurmis, pasis, telis, barhais, sheikhs and julahas being the chief among castes of the former type. The labour for plantations is supplied mainly by kurmis, muraos, pasis, koris, ahirs and chamars.

## APPENDIX VI.

Statement showing rural wages in 1916 and 1928 for unskilled and semi-skilled labour.

Districts.	Per-centage of non-agri-cultural popu-lation.	Cash rates of unskilled labour.		Per-centage of differ-ence.	Daily wage of carpenters.		Per-centage of differ-ence.	Daily wage of blacksmiths.		Per-centage of differ-ence.
		Rs. a. p.	1928.		Rs. a. p.	1916.		Rs. a. p.	1928.	
<i>Hill Tracts—</i>										
Dehra Dun (Chakrata)	47	0 4 0	0 8 0	78	0 12 0	0 10 0	33	0 12 0	0 8 0	—
Do (Dun)	47	0 4 3	0 11 0	41	0 8 0	0 12 0	50	—	0 8 0	33
Almora	5	0 4 9	0 11 0	132	0 10 6	1 9 0	83	0 9 7	0 12 0	—
Garhwal	7	0 6 3	0 8 0	28	0 10 0	1 4 0	100	0 10 10	1 4 0	109
Naini Tal (hills)	27	0 6 3	0 8 3	65	0 10 5	1 2 3	75	0 10 10	1 2 0	80
Average	—	0 4 9	0 8 3							
<i>Bundelkhand with Mirzapur—</i>										
Jhansi	37	0 2 3	0 3 0	33	0 5 4	0 10 0	88	0 5 4	0 8 0	50
Jalaun	28	0 2 6	0 4 6	80	0 5 3	0 8 6	62	0 5 3	0 8 6	62
Hamirpur	27	0 2 6	0 3 6	40	0 5 0	0 8 9	75	0 5 0	0 8 6	70
Banda	22	0 2 0	0 3 3	63	0 5 0	0 8 6	70	0 5 3	0 8 0	52
Allahabad (Bundelkhand)	24	—	0 4 0	—	0 5 0	0 9 0	80	0 5 3	0 8 0	52
Mirzapur	31	0 2 3	0 3 6	56	0 5 6	0 12 0	118	0 5 6	0 10 0	82
Average	—	0 2 3	0 3 6	56	0 5 2	0 9 5	82	0 5 3	0 8 6	62
<i>North-Western Group—</i>										
Saharanpur	42	0 3 9	0 5 0	33	0 9 0	1 0 0	78	0 9 0	1 0 0	78
Muzaffarnagar	45	0 3 3	0 5 0	54	0 8 0	0 12 0	50	0 8 0	0 12 0	50
Meerut	43	0 3 0	0 5 0	67	0 8 3	1 0 0	94	0 7 6	1 0 0	113
Bulandshahr	35	0 3 3	0 5 0	54	0 7 3	0 15 0	107	0 7 0	0 12 0	71
Bijnor	44	0 3 6	0 5 0	43	0 7 3	0 12 6	72	0 7 3	0 12 6	72
Bareilly	32	0 2 9	0 4 0	45	0 6 6	0 10 6	54	—	0 10 6	—
Moradabad	32	0 3 0	0 4 6	50	0 6 6	0 11 6	77	0 6 4	0 11 6	82
Naini Tal (Tarai)	27	0 3 3	0 4 9	12	0 9 0	0 12 0	33	0 9 0	0 12 0	33
Do (Bhabar)	27	0 3 9	0 8 0	59	—	—	—	—	—	—
Average	—	0 3 6	0 5 3	50	0 7 9	0 13 2	70	0 7 9	0 12 0	66
<i>West Central Group—</i>										
Aligarh	39	0 3 0	0 5 0	67	0 7 3	1 0 0	121	0 7 0	0 12 0	71
Mittra	41	0 3 6	0 5 0	43	0 8 3	1 0 0	94	—	0 12 0	—
Agra	43	0 3 3	0 5 0	54	0 7 3	1 0 0	121	0 8 0	0 12 0	50
Mainpuri	25	0 2 9	0 5 0	82	0 6 0	0 12 0	100	0 8 3	0 12 0	45
Etah	27	0 2 9	0 4 0	45	0 7 3	0 7 3	66	0 5 9	0 12 0	109
Budaun	26	0 2 6	0 4 0	60	0 7 0	0 12 0	71	0 6 9	0 10 0	48



## APPENDIX VI—continued.

Statement showing rural wages in 1916 and 1928 for unskilled and semi-skilled labour.

Districts.	Per-centage of non-agri-cultural popu-lation.	Cash rates of unskilled labour.		Per-centage of differ-ence.	Daily wage of carpenters.		Per-centage of differ-ence.	Daily wage of blacksmiths.		Per-centage of differ-ence.
		1916.	1928.		1916.	1928.		1916.	1928.	
<i>West Central Group—continued.</i>										
Shahjahanpur ..	30	0 2 9	0 3 6	27	0 6 3	0 9 0	44	0 6 1	0 9 0	48
Farrukhabad ..	26	0 2 9	0 4 6	64	0 7 3	0 12 0	66	0 8 0	0 12 0	50
Etawah (Auraiya) ..	25	0 2 6	0 4 6	80	0 7 6	0 12 0	60	0 7 6	0 12 0	60
Etawah (rest of the district)	25	0 3 0	0 4 6	50	0 6 0	0 15 0	150	0 5 6	0 15 0	173
Pilibhit ..	28	0 2 3	0 3 6	27	0 6 0	0 9 0	50	0 5 9	0 8 6	48
Haridol ..	20	0 2 3	0 3 6	56	0 6 0	0 11 0	63	0 6 3	0 11 0	76
Lucknow ..	46	0 2 6	0 4 0	60	0 7 0	0 12 0	71	0 7 6	0 12 0	60
Average ..	—	0 2 9	0 4 3	55	0 6 10	0 12 7	84	0 6 10	0 11 9	72
<i>East Central Group—</i>										
Cawnpore ..	33	0 2 9	0 4 6	64	0 7 0	1 1 0	143	0 6 3	0 14 0	124
Ratehpore ..	22	0 2 3	0 4 0	78	0 5 7	0 10 0	79	0 5 4	0 10 0	88
Allahabad (Doab)	24	0 2 3	0 4 0	100	0 5 0	0 12 0	140	0 5 0	0 10 0	100
Allahabad (Oudh)	24	0 2 3	0 4 0	78	0 5 3	—	—	0 5 1	0 10 0	97
Unao ..	19	0 2 6	0 4 0	60	0 7 3	0 12 0	66	0 6 7	0 12 0	82
Rae Bareilly ..	20	0 2 3	0 3 6	83	0 6 0	0 12 0	100	0 6 0	0 10 0	67
Sitapur ..	20	0 2 3	0 3 0	33	0 5 9	0 10 0	74	0 5 9	0 8 0	40
Kheri ..	15	0 1 9	0 3 0	71	0 5 1	0 10 0	64	0 6 1	0 9 0	48
Fyzabad ..	21	0 2 3	0 3 0	33	0 5 3	0 9 0	71	0 5 3	0 8 0	52
Gonda ..	23	0 2 3	0 3 3	44	0 5 0	0 10 0	100	0 5 0	0 9 0	80
Bahraich ..	14	0 2 3	0 3 0	50	0 6 3	0 12 0	92	0 6 0	0 11 0	83
Sultanpur ..	20	0 2 3	0 3 6	33	0 4 10	0 9 6	87	0 4 10	0 9 0	86
Parabgarh ..	14	0 2 3	0 3 6	75	0 5 0	0 10 0	100	0 5 0	0 10 0	100
Bara Banki ..	20	0 2 3	0 4 0	78	0 6 0	0 11 0	83	0 6 3	0 12 0	92
Average ..	—	0 2 3	0 4 6	56	0 5 9	0 11 0	91	0 5 7	0 10 0	79
<i>Eastern Group—</i>										
Benares ..	35	0 2 9	0 4 3	55	0 3 10	0 9 0	135	0 3 10	0 8 0	108
Jaunpur ..	24	0 2 6	0 4 6	80	0 5 9	0 12 0	109	0 5 9	0 12 0	109
Ghazipur ..	19	0 2 6	0 3 6	—	0 5 3	0 9 0	71	0 5 3	0 9 0	72
Ballia ..	21	0 2 6	0 3 6	40	0 6 6	0 9 9	50	0 5 6	0 9 6	72
Gorakhpur ..	8	0 1 9	0 2 3	29	0 5 9	0 8 6	48	0 5 3	0 8 3	19
Beasi ..	8	0 1 9	0 2 9	57	0 5 3	0 8 3	57	0 5 3	0 8 0	52
Amangari ..	15	0 2 0	0 2 6	25	0 5 3	0 9 0	71	0 5 3	0 8 0	52
Average ..	—	0 2 3	0 4 6	44	0 5 4	0 9 4	75	0 5 2	0 8 8	68
Average for the province	—	—	—	54	—	—	80	—	—	70

## APPENDIX VIII.

Statement showing the number of labourers employed on the Tea Plantations.

Name of district.	Number of tea gardens.	Daily average number employed.			
		Garden labour (permanent)	Outside labour.		Total.
			Permanent.	Temporary.	
Almora .. ..	15	341	204	98	643
Dehra Dun ..	21	1,694	453	1,047	3,194
Garhwal .. ..	2	15	42	25	82
Total .. ..	38	2,050	699	1,170	3,919

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UNITED PROVINCES.

*Preliminary.*

In the United Provinces industrial hygiene has been receiving systematic attention only from July, 1926. Previous to this there were no arrangements for inspecting health conditions in factories. The Conference of Sanitary Commissioners in May, 1919, first urged the appointment of medical officers of health for this work. The recommendation was still under the consideration of the local government when the Government of India addressed them on the subject in April, 1921, in connection with the Conventions and Recommendations of the International Labour Conference. The suggestion of the Washington Conference for the creation of a Government health service for factory inspections was examined. It was decided, however, that at present a whole-time medical inspector was necessary only in Cawnpore, and that other towns could be served by the medical officers of health.

In July, 1926, Government formally appointed medical officers of health of municipalities as additional inspectors of the factories situated in municipal areas and the district medical officers of health for those situated outside municipalities. In districts and municipalities where no medical officers of health exist civil surgeons perform these inspections. These officers have been empowered to inspect the general sanitation, ventilation, lighting, humidity, sanitary conveniences and water supply of the factories and the arrangements for the safety of the workers, means of escape, employment of women and children, rest, holidays and hours of work. They are also authorized to inspect registers.

In 1927 bye-laws for regulating the construction and alteration of factories were approved by Government and are now being worked.

The reply to items in the list of subjects given below relates mostly to Cawnpore. Information for other centres of industry is not available.

**III.—Housing.**

16. (i) There are about 70 mills and factories in and around Cawnpore with an average of 32,617 workers per day. While a number of these have quarters for their supervizing and menial servants, only ten of the concerns have provided houses for the operatives (labourers) and even these do not provide accommodation for all the employees. The Cawnpore Woollen Mills, the North-West Tannery, Messrs. Cooper, Allen & Company and the Union Sugar Works provide quarters for about 83 to 90 per cent. of their workers. Others provide for about 10 per cent. only. Of the total labour population of 32,617 in Cawnpore, about 6,957 only may, therefore, be taken to have been provided houses by their employers. A proposal to provide housing accommodation for 20,000 operatives by the joint millowners of Cawnpore has been under consideration of the respective authorities for some years, but nothing definite has been done so far.

(ii) The bulk of about 25,660 labour population not provided with residential accommodation by their employers live in *bastis* or *hatis* belonging to private landlords. Small mud huts, with one room at the back and one room or verandah in

front, is the usual type of accommodation available. The size and height vary, being seldom more than 8 ft. by 10 ft., with height of 6 ft. to 8 ft. The only outlet for light and ventilation is the main door. These quarters are often sub-divided between two, three or four families, and as many as ten persons may be found in one of these huts. I understand worse conditions exist.

Under my instructions one of my assistant directors inspected the *mohallas* of Khalasi Lines, Gwaltoli, Colonelganj, Lachhmanpurwa and Raipurwa in Cawnpore, where most of these *bastis* are situated. The conditions are deplorable. A bad odour permeates the whole place, due to dirt, stinking drains and filth and the condition after the rains is even worse. Some attempts have been made by the municipality of Cawnpore to improve the roads and drains, but nothing short of complete rebuilding of the areas on sanitary lines can improve matters.

(iii) Very rarely accommodation is provided by the workers themselves. Possibly a few better class workers have their own houses.

18. (i) The quarters provided by the employers are generally single-roomed tenements. The size of standard rooms in the British India Corporation's settlements is 12 ft. by 10 ft., with height averaging 10 ft. The Corporation permit only three adults in such rooms.

The type of accommodation supplied is sufficient only when workers live singly or two or three males combine. When they live with their families and grown-up children the accommodation is insufficient. The better-class workers are not satisfied with the quarters which some of the mills provide.

(ii) In the quarters provided by the British India Corporation there are several grades, and they all generally conform to the sanitary type except those that are built back to back.

The private quarters provided by landlords are insanitary to the utmost limit.

19. The accommodation available in each class is fully and readily utilized by the workers.

20. Rent rates vary from Re. 1-2 to Re. 1-12 per month for small quarters and Rs. 3 to Rs. 3-8 for larger quarters. For the superior quarters it varies from Rs. 8 to Rs. 9 per month. From the tendency of the labourers to "combine" and considering their average earnings, it seems they cannot afford these rents.

21. In all the quarters provided by the employers sub-letting and occupation by tenants in other's employ is theoretically prohibited, but I understand it is not uncommon for the tenants to have outsiders in the garb of relations and hence sub-letting is frequent.

Eviction from employers' quarters as a rule takes place with the termination of employment. This is not, however, strictly enforced in the British India Corporation's settlements except when a man is definitely condemned by the *sadr panchayat* of the settlement for serious crime or breach of the peace.

#### IV.—Health.

23. (i) Except the British India Corporation no employers have kept health statistics of their workers. The statistics supplied by them compare very favourably with those for the municipal area. The following table will show the death-rates for the different industrial settlements in Cawnpore :—

*Average Mortality Figures from 1921 to 1928.*

Cawnpore Municipality.	British India Corporation's settlements.	Khalasi Lines. (a)	Raipurwa. (b)	Gwaltoli. (c)	Colonelganj. (d)
46·32	34·58	65·95	54·43	75·29	46·44

(a) Labourers 90 per cent. of the population.

(b) Labourers 70 per cent. of the population.

(c) Labourers 60 per cent. of the population.

(d) Labourers 50 per cent. of the population.

Tuberculosis is also more prevalent in these industrial *bastis*. The death-rate from this disease in the Cawnpore municipality during the years 1921 to 1924 ranged from 2·1 to 3·6. The death-rate in the different *mohallas* of the city where labour predominates is as high as 8·8 per thousand among females.

(ii) Taking the average of eight years (1921 to 1928) the rates for the *mohallas* where labour predominates are as follows :—

—	Cawnpore Municipality.	Khalasi Lines.	Rai-purwa.	Gwal-toli.	Colonel-ganj.	Lachhman purwa.
Birth-rate	37·53	57·39	35·17	51·12	43·09	36·94
Infantile mortality rate.	451·84	392·41	550·32	457·19	399·33	416·11

(iii) (a) Study was made particularly of the working conditions of the labourers in places not congenial to health, as for instance in the lime houses of the tannery, flour mills, cotton mills, oil mills and foundry, specially where fumes and dust emanate. An average cotton mill is not equipped with all the modern devices for the health and comfort of the workers.

It was found that the health of the operatives working under more unfavourable circumstances did not materially differ from those working under favourable circumstances. This can only be attributed either (i) to the workers being replaced as soon as their health breaks down or (ii) the men developing an immunity to the effects of the particular environs or circumstances. Employers as a rule were extremely reticent in furnishing information regarding (i), but one undertaking frankly admitted that they "get rid" of the men as soon as they become unfit. In the absence of statistics it is impossible to say whether the "breakdown" is due to the effects of industry.

(b) Except in the organized colonies of the British India Corporation the working conditions at the homes of labourers are very unsatisfactory.

(iv) Owing to shortness of time, details of the dietaries could not be obtained for more than a couple of hundred labourers. A worker receiving Rs. 15 per month takes *atta* three-fourths of a seer per head and *dal* one-fourth of a seer for the whole family per day. Those belonging to the eastern districts of the province take one seer of rice instead of *atta*. *Bajra* often forms the bulk of the food of many of these persons. Oil, *ghi* and vegetables are rarely taken. People of this class usually have only one meal—in the evening, parched gram and *gur* in small quantities being the diet at noon.

People receiving Rs. 15 per month or more have a little more liberal diet, with vegetables, but if they have a family the proportion becomes less.

From what my assistant director has seen he has no hesitation in saying that the diet is frequently insufficient and as a rule ill-balanced.

(v) As a rule, the general physique of the labourer is poor, and this view is shared by the employers. In Messrs. Cooper, Allen's factory and the new electric power house only did my assistant director come across some men with fine physique, and the managers were of opinion that they were well above the general average.

The general feeling of some millowners is that labourers keep good health for about ten months after joining, after which they show signs of breakdown, and unless they take rest they are seldom found satisfactory after this period.

(vi) *Effect of disturbance of sex ratio in industrial cities.*—Beyond giving a general opinion that there is a good deal of venereal diseases among the labourers it is difficult to give statistics to prove the statement. From the hospital records it is not possible to find out the details, as it is difficult to sort out the labourers from the general population. The hospital statistics supplied by the British India Corporation for their own colonies show that the incidence is not high, but this is probably because the colonies are well under supervision and intermixing of families is not so common. The opinion is however held that venereal diseases are very prevalent in the *bastis* because, due to paucity of living quarters, it is common for two families to share a single room and also to shelter adult relations of either sex.

I consider that separate blocks of family quarters (larger than the rest) should be provided for in all schemes of industrial housing. In the settlements of the British India Corporation family quarters are provided for the better class workers only. This should be carried down to the lowest workers.

\* 24. (i) The larger concerns usually have well-equipped dispensaries in charge of medical men, either whole-time or part-time. Arrangements at the McRobertganj and Allenganj settlements of the British India Corporation are very good. Including

the welfare staff four doctors, five visiting nurses, eight matrons and about twelve *dais* are employed. In the smaller concerns there are no medical facilities, and people have recourse to the Government or municipal dispensaries.

25. Medical facilities are freely utilized both by men and women, but, as is the general practice in India, treatment is not followed consistently.

26. (a) The general consensus of opinion of the officers of this department is that in the smaller concerns (some of which employ even up to 400 men) arrangements for water supply and conservancy are neither adequate nor satisfactory. In one or two instances this neglect was particularly marked. In the larger concerns the arrangements are satisfactory.

(b) At home people either use the municipal public latrines or the drains and open spaces in and round the *bastis*. In the organized colonies latrines and urinal accommodation is provided and a regular conservancy staff is employed to keep them clean.

27. As indicated above, sanitary supervision of the mills and factories in the United Provinces commenced from the middle of 1926, and medical officers of health and assistant directors of public health are inspecting the sanitation of the premises and the health condition of workers from that time.

28. (i) Rules for the control of temperature which have recently been made by the local Government have improved the working conditions in cotton mills.

29. (i) No indication of the prevalence of strictly industrial diseases was found at any of the factories visited by my assistant director.

30. (i) There is no sickness insurance worth the name. I understand the British India Corporation have in view a scheme of non-employment and sickness insurance.

(iii) Experience at the British India Corporation's dispensaries show that the demand for western medicines is very great, and as there is no paucity of medical men in towns I do not see any difficulty.

31. (i) The British India Corporation grant two weeks' leave with pay to every expectant mother and as much leave without pay as necessary. Medical attendance, maternity wards and nursing are provided free. Other firms also grant leave with pay for varying periods.

(iii) Two weeks' leave on full wages is not sufficient, and for fear of loss of wages women workers may often return to their work sooner than is good for their own health or the health of the child. There are now three maternity centres in Cawnpore, but the infant mortality of the town continues to be the highest in the province. I consider that one month's leave on full wages should be given to every expectant mother—the leave to be taken as far as possible ten days before the anticipated date of confinement. The employers will object to this on the ground of cost. I consider that statutory provision should, therefore, be made in the Indian Factories Act to secure this benefit for women workers.

#### V.—Welfare other than Health and Housing but including Education.

32. (i) The British India Corporation are the only concern which have undertaken the welfare of their workers on an organized scale. The work of their welfare department extends to providing recreation, entertainments, cinemas, schools for boys and girls, night schools, industrial classes, midwives' training classes, health lectures and health instruction in schools, health exhibitions and home visiting by nurses.

(ii) I am not aware of the existence of any private organization for attending to the welfare of the industrial classes.

33. The British India Corporation employ a complement of trained welfare workers consisting of three doctors, four nurses, eight compounders, four midwives, twenty-five teachers and two sergeant patrols. Total staff (including conservancy establishment) consists of 147 whole-time paid workers. Messrs. Begg, Sutherland have recently engaged the services of a superintendent to organize welfare work.

I am of opinion that factory owners should be required by law to make reasonable provision for the welfare of their workers and employ paid officers for the purpose. Where a concern is not sufficiently large to have a staff of its own I recommend that several concerns should combine for the purpose, and the incidence of cost, etc., should be fixed. The official health department can co-operate more effectively in the amelioration of the health of the industrial classes through such organizations.

24. (a) The British India Corporation have introduced recreational activities through athletic, dramatic, wrestling and other clubs, scouting and libraries. Warm clothing is provided for poor babies.

(b) No other agencies have undertaken welfare for the industrial workers.

35. The results, so far as the British India Corporation's colonies are concerned, are very satisfactory. There is a fine neighbourly and sportsmanlike spirit among the workers. The statistics quoted under IV (23) (i) will demonstrate the value of such organizations.

### VII.—Safety.

48. According to rules every concern with 500 workers or more must have first-aid appliances and medical relief, and this is usually provided. Smaller concerns do not, however, care very much for these requirements. Except in the electric power house my assistant director did not find any of the supervising staff trained in first-aid in the institutions he visited.

50. Better health, light and working conditions and hours of work interspread with suitable intervals lead to greater safety of the workers. Beyond making this general statement, however, it is not possible to say precisely the effect of the existing regulations on the safety of individuals.

### X.—Special Questions relating to Women, Young Adults and Children.

89. *Work of Women and Children in Factories not Subject to Act.*—The present provisions of the Indian Factories Act were inadequate to deal with a case recently brought to notice. Glass bangles are manufactured on a large scale in Ferozabad (Agra district). A large part of the work consisting of joining is carried on in private dwellings and in small concerns which do not come under Section 2 (3)(b) of the Indian Factories Act. Inspection by the Assistant Director of Public Health and later by the Chief Inspector of Factories revealed the working conditions to be most dangerous to the health of the workers. The municipal board was asked by this department three years ago to frame bye-laws to regulate the trade on more healthy lines, but the board did not do so. Government have now taken up the matter, and the municipality will make the bye-laws, but these matters are more expeditiously regulated by the Factories Act instead of by the Municipalities Act. I recommend that the scope of Section 2 (3) (b) of the Act be enlarged to include any trade, practice or calling which entails manufacturing processes, irrespective of the number of men employed, and the nature of the power used, and local Governments should have the power to close such works if recommendations regarding proper ventilation, lighting, health and working conditions of the operatives are not complied with.

### XIII.—Industrial Efficiency of the Workers.

115. Better working conditions and welfare work inspire confidence among workers, keep down wages and result in ultimate economy to employers. No statistics are, however, available to the Public Health Department in the case of industrial workers to prove that expenditure on these objects has been accompanied by increase of production and economic gain to the employers. Certain statistics are not kept at all, others are not likely to be supplied, and comparison is further rendered difficult by the constant changes in methods and machinery that are being made. I believe, however, that if expenditure on health and welfare did not bring in an economic return in some form or other the British India Corporation would not be spending about Rs. 60,000 annually on these heads.

In the Sarda canal construction, where occasionally about 10,000 labourers were employed, the economic value of health arrangements has been amply demonstrated. Below is given the remark of Sir Bernard Darley, Chief Engineer in charge of the construction work:—

"It is very difficult to estimate the economic value of the malarial staff at Banbassa in rupees, annas and pies. The work that has been done has certainly enabled the working season to be extended from April 15 to, say, June 15, i.e., two months each year or ten months in five years. In other words, it will thus be possible to dispense with the services of about half the divisional staff a year earlier—a saving of probably Rs. 50,000.

"If, however, we take into account the value of delivering water one year earlier for irrigation, the monetary value of the anti-malarial work would probably run to half a crore of rupees.

"Secondly, by keeping the labour fit it has been possible to inspire confidence and good contractors have come forward to take up the work at lower rates than was deemed possible at first.

"I have gone over the estimate and putting this saving at Re. 1 to Rs. 2 per cubic feet of masonry, etc., this saving might be fairly estimated at Rs. 1,50,000. That is of course assuming that any contractors would have taken up the work at all under the adverse circumstances obtaining before the malarial staff got to work. Indeed, it is very doubtful if the Sarda canal head could have been built at all without the expert help we have received from the Public Health Department."

116. Equally important with the introduction of machinery and labour-saving devices for increasing the efficiency of workers are good housing, welfare work, better working conditions and proper dietaries. Better home comforts with reduction of alcoholism and venereal diseases will produce a definitely better corps of workers able to do more concentrated work.

#### XVII.—Administration.

139. *Factory Inspection.*—(i) *Adequacy of staff.*—The district health service fully meets the needs of industrial hygiene in the rural areas—specially in the case of outlying and seasonal factories situated in the interior. In municipalities medical officers of health are at present able to perform inspections in addition to their normal duties. For Cawnpore, however, I think it would be an advantage to have a separate and whole-time medical inspector, *under the Medical Officer of Health*, as the normal duties of the medical officer of health there are heavy.

Twenty districts of the province do not at present have a public health staff. The duty of inspecting the health conditions of industrial workers has therefore been laid on the civil surgeons. I am not aware how far these officers are able to visit factories—specially those in the interior of districts. Under the orders of Government, district medical officers of health, when appointed to these districts, are to take over this duty from the civil surgeons. The extension of the health services to these twenty districts has been held up for three years for lack of funds.

#### XVIII.—Intelligence.

143. No health statistics are at present available for industrial areas or settlements or for operatives employed in industrial concerns. In May, 1921, on a reference from the International Labour Office, Geneva, the Government of India suggested to the local Governments the desirability of keeping health statistics of industrial workers. Definite suggestions were made by me to Government but no final orders were issued.

144. I am strongly of opinion that records relating to vital statistics and general sickness of the industrial workers, periods of employment, previous employments and leave, should be kept and factory owners should be compelled by rules under the Factories Act to supply necessary information to the medical officer of health.

#### General Remarks.

*Industrial Areas and Labour Settlements.*—The municipality of Lucknow has reserved a separate area for the industrial concerns. This practice should be strongly commended as there are many advantages. The working classes can be housed close to the works, and if quarters cannot be provided by employers individually, grouping or co-operative action should be possible. Abuses arising out of alcoholism and venereal diseases, which are the accompaniment of industrial population, can also be regulated more effectively, as the labour colony will be at some distance from the towns. Educative propaganda suited to their special needs can also be more effectively done.

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The terms of reference to the Royal Commission refer chiefly to labour conditions in industrial centres and do not deal with the more or less casual labour employed on canal works in the United Provinces.

The following notes therefore merely describe labour conditions during the construction of the Sarda canal which is the largest irrigation work ever undertaken by the Government of the United Provinces.

### I.—Recruitment.

3. (i) Labour employed by the Irrigation Branch is of two kinds—skilled and unskilled.

Skilled labour is generally obtained from towns and mainly comprises masons, carpenters, blacksmiths, painters and fitters. These occupations are generally hereditary.

Unskilled labour is available in towns and villages and is recruited mainly from the following communities :—

*In the Plains*.—From Beldars, Lodhas, Lunias, Chamars, Pasiyas, Kohlis and Julahas.

*In the Hills*.—From Dumras, Dutials, Sauns and Bhists.

They are inefficient labourers who will not undertake earthwork, but confine their activities to felling trees, cutting jungle and collecting boulders and shingle.

Local labour is not available in the upper reaches of the Sarda canal situated in the dense *sal* forest and all the labour employed had to be imported.

The more important recruiting areas were :—

*For the Headworks*.—All the stone masons were imported from Gwalior, Bundelkhand and the Central Indian States because the local masons are the brickwork masons and the stone masons available in the Kumaun hills are very inferior workmen and migrate to the plains in November and insist on returning to the hills in March. The average number of stone masons imported annually was 300.

Between 3,000 and 4,000 unskilled labourers were also imported annually from Bundelkhand and the Central Indian States because the labourers imported from the districts adjacent to the headworks dislike working in wet foundations and moreover insist on returning home for harvesting operations which continue for about a month.

In addition to the above, about 5,000 unskilled labourers were employed from the middle of November until the end of March, when they dwindled down to about 1,000. These labourers came from the Kumaun hills and from Bareilly, Budaun and Shahjahanpur districts.

For the entire Main canal and the upper reach of the Kheri branch, situated within the *sal* forest, all the skilled and unskilled labour was recruited from the adjacent districts.

Sufficient local labour was available for all the other canals of the Sarda.

Large contractors employ agents for recruiting labourers who demand a considerable advance before leaving their homes and many of them decamp with a portion of these advances, which are very difficult to recover since the repeal of the Workmen's Breach of Contract Act. All the skilled and unskilled labour imported from Bundelkhand, Gwalior and the Central Indian States received their travelling expenses and on an average one month's pay in advance.

(ii) The existing methods of recruiting labour for canal works is as satisfactory as any method that can be devised.

(iii) Public employment agencies would be useless for supplying labour for canal works.

8. (i) Average duration of employment is seven months annually. A working day varies from 8 to 10 hours according as the labour is employed on daily or contract work.

(ii) During the sowing and harvest seasons labourers are scarce in the districts. Throughout the remainder of the year casual labourers can generally obtain work on the canals and in normal years the supply is frequently less than the demand.

### II.—Staff Organization.

10. The entire staff required for supervising and setting out works are government employees.

15. (i) Practically all canal works are given out on contract after calling for tenders in the open market.

Departmental or daily labour is employed on only those works which are not susceptible of being paid for by measurements or cannot be entrusted to contractors, for example, pumping arrangements for unwatering foundations, workmen employed in canal workshops, etc.

(ii) The approved contract agreement forbids a contractor from assigning or sub-letting a contract without the written permission of the Engineer-in-charge.

Sub-letting is rare and should not be encouraged on canal works, but the majority of the larger contractors enter into piece work agreements with their labourers for earthwork, collecting materials, moulding bricks, laying concrete, breaking ballast, etc.



(iii) As a general rule contractors employed by the Irrigation Branch are small contractors who exercise no supervision over working conditions and take no interest whatsoever in arranging for a good water supply and providing sanitary arrangements for their men.

On important works employing large labour, sanitary arrangements are made by Government and supervised by departmental officers.

(iv) The contract system is the only efficient and satisfactory method of executing works, because it is utterly impossible to supervise efficiently departmental labour employed on a large scale.

### III.—Housing.

16. (i) *By Employers.*—On large works contractors usually provide temporary huts for their imported labourers who remain on the works throughout the working season.

Larger contractors allow local labourers about a couple of days to erect their own shelters and usually pay their wages for these days.

(ii) Practically all canal works are constructed on the contract system and accommodation is not provided by Government.

(iv) Local labourers employed by smaller contractors invariably reside at home when their work is situated within about four miles of their villages. In all other cases workers build temporary grass huts on the site of the work for which they receive nothing from petty contractors.

### IV.—Health.

24. (i) *By employers.*—Canal contractors never provide medical facilities for their men.

(ii) Malaria was one of the many great difficulties encountered during the construction of the Sarda headworks and Main canal, both of which are in the submontane Tarai tract, which is one of the most malarious areas in the world. The death-rate is about 45 per mille, the infantile mortality is approximately 250 per mille, the birth-rate 36 per mille and the ratio of fever deaths to total deaths 90·5 per cent.

In April, 1921, an Assistant Director of Malariology was appointed Chief Medical Officer of the Sarda canal. Stationary hospitals were erected and maintained at large labour centres and travelling dispensaries were provided at the less important centres. All medical relief including medicines was entirely free.

In addition to free medical attention, the following anti-malarial measures were adopted :—

Systematic blood examination of all cases attending the Headworks hospital was undertaken to determine the type of infection, the sexual carriers and the effect of the different forms of treatment.

The efficacy of different lavicides, such as crude oil, kerosene oil, Empranin, cresol, Paris-green, etc., were tested in the laboratory and field ; of these, Paris-green gave the best results followed by crude oil and castor oil mixtures.

Prophylactic quinine was issued to the staff and labour during the malarious periods of the year. All the residential quarters were fumigated periodically and the swamps in the vicinity of camps were drained and oiled or treated with Paris-green.

Electric light and fans have been provided in all the quarters at the Headworks and arrangements are under consideration for making all the permanent quarters mosquito proof.

Outside the submontane area, epidemics among the canal labourers are rare and medical aid is obtained from the district dispensaries maintained by district boards, but these dispensaries are generally unpopular.

25. (i) Indian labourers are naturally averse to attending dispensaries and under no circumstances become indoor patients unless they are forced to do so or realize that this is the only hope of recovery.

During the construction of the Sarda canal the sick were rounded up by daily house-to-house visitations, and taking everything into consideration adequate use was made of the hospitals and dispensaries which were decidedly popular because the doctors were specially selected and handled the labourers tactfully and sympathetically.

26. Permanent latrines were constructed on the " kadamcha " pattern at various sites and incinerators were provided in close proximity to each set of latrines.

As the population increased, additional temporary latrines on the " trench " pattern were erected where necessary.

A sanitary inspector with an adequate staff of sweepers was employed for the conservancy of the Headworks where over 10,000 workers were concentrated during the winter months for seven working seasons (November to May).

Similar arrangements on a smaller scale were made at the sites of the other important works, for example, the Jagbura siphon and the Deoha barrage.

Labour was not concentrated to any large extent along the Main canal and branches and sanitary arrangements were considered unnecessary and unworkable.

(ii) Water-works were installed at the Sarda headworks, but the majority of the labourers preferred to drink water from the Sarda river which is snow fed and free from contamination.

Elsewhere labourers obtained drinking water from departmental or private wells; the former were disinfected periodically and during the seven years of construction no epidemic occurred among the labourers.

## XII.—Wages.

96. (ii) The prevailing rates of wages are :—

(a) *Time basis.*

Class of labourers.	Present rate per day.		Average.	Pre-war rates in plains.
	Jungle.	Plains.		
	Rs. a.	Rs. a.	Rs. a.	Rs. a. p.
Beldars (earthwork) .. .. .	0 8	0 6	0 7	0 4 0
Beldars (masonry works) .. .. .	0 10	0 8	0 9	0 6 0
Women .. .. .	—	—	0 4	0 2 6
Children .. .. .	—	—	0 3	0 1 6
Masons .. .. .	1 12	1 4	1 8	0 12 0
Carpenters .. .. .	—	—	1 4	0 12 0
Blacksmiths .. .. .	—	—	1 0	0 10 0
Mistries .. .. .	—	—	2 0	1 0 0

(b) *Piece work basis.*

Class of labourers employed.	Class of works.	Unit.	Present rates.		Pre-war rates (plains).
			Jungle with long leads and heavy masonry.	Plains with ordinary leads and ordinary masonry.	
			Rs. a.	Rs. a.	Rs. a
Beldars, etc. .. .. .	Earthwork excavation only.	Per thousand cubic feet.	6 4	2 8	1 9
Masons, ordinary .. .. .	Masonry work.	Per hundred cubic feet.	3 0	2 8	1 8
Through rate for masonry on piece work including cost of other labour employed.	—	Ditto	5 0	4 8	3 0

98. The average sum remitted by canal labourers working away from their homes is about one-third of their earnings.

100. Payments are invariably made to the contractors, who in turn pay their labourers themselves or through their agents. Workers always lose when payment is made by a contractor's agent.

102. Overtime is generally paid for at the normal hourly wage of the class of labour employed.

Sunday work is paid for at the ordinary work day rates.

103. No standardization is feasible on canal works.

104. Labour available in the open market increases or decreases with an increase or decrease in the wages paid.

105. It is my own personal opinion that minimum wages should be fixed by statute for each class of labour. There will certainly be difficulties in enforcing this in the case of casual labour employed by canal contractors, but these will be overcome gradually once the principle of a minimum living wage is conceded.

106. Fines in the strict interpretation of the word are never levied on casual canal labourers.

107. Wages are paid by the week or by the month.

(ii) Four to six days elapse before payment.

(iii) (a) and (b) Not necessary for canal labourers.

(iv) Unclaimed wages usually lapse to the employer.

In the case of departmental labour efforts are made to trace and pay the heir the unclaimed wages.

110. Leave is not countenanced for daily paid labourers.

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MR. D. W. CRIGHTON, SUPERINTENDENT, GOVERNMENT PRESS, UNITED PROVINCES.

#### I.—Recruitment.

Allahabad is a large printing centre, and the largest establishment is the Government Press, employing 1,200 persons, in addition to which some 120 more are employed at branch presses in Lucknow and Naini Tal. In Allahabad there are also two important newspaper offices, a large book-printing press, a modern type foundry, and numerous medium to small commercial presses. Printing, indeed, is the largest industry in the place, and I estimate that there are about 4,000 persons directly employed.

Compared with the printing industry in western countries, a peculiarity to be noticed is that female labour is unknown, youths and boys working on processes normally undertaken by women and girls in the west.

(2) With printing playing so important a part in the life of the community, there is no dearth of suitable labour. It is principally local and in many cases all the male members of families and their near relatives are employed in the industry. There are, nevertheless, numbers who have a connection with the surrounding villages and others with agriculture. The latter are usually employed on unskilled work and take employment temporarily to relieve the family exchequer between harvests or when their labour is not required on the land, leaving their families and returning at frequent intervals until the land demands their labour.

(3) The existing method of recruitment is by direct application, and it is the practice in the Government Press to engage labour on the 1st and 15th of each month for any vacancies that may occur. Highly skilled men, particularly for new processes introduced by the extended use of modern machinery, are scarce, however, and recourse has to be made to advertising in the papers of the Presidency cities.

Recruitment is unaffected by caste restrictions, but it may be of interest to note that Muslims largely predominate, especially among operatives. In the Government Press the figures are: Muslim operatives, 695; Hindus, 329; Muslim clerks, 77; Hindus, 99. This proportion is general in Allahabad.

(7) It is impossible to give any idea of the extent of unemployment in the printing industry as there is no agency instituted either by Government, the employers, or the employed, for dealing with this subject. That there are many unemployed is evident, nevertheless, from the considerable numbers who present themselves for employment or make application by letter.

Unemployment is not so seasonal in character as it is in Great Britain (where printing is a barometer that reacts to the slightest change in the prosperity of the country), but rather represents a normally constant surplus over what the industry can employ. This is due, in a great measure, to the purposes for which printing is at present used, and does not depend on the activity or depression of other trades and industries, or on the seasons, or on the habits of the people. By that I mean that

in Great Britain commercial printers are busiest in autumn and winter on publicity printing, and book printers in summer and autumn on works of fiction and other literature, whereas in India both those classes of printing are negligible in quantity and consequently printing employment is not affected in the same way.

As to a remedy, I am of opinion that the country is not ripe for legislation introducing compulsory unemployment insurance and labour bureaux on the lines followed in Great Britain. The difference lies in the fact that India is essentially an agricultural country and could produce more than sufficient to support its population if fully developed, therefore the rural population is not compelled to seek employment in the towns; indeed, migration to the towns could be retarded and possibly urban surpluses absorbed. To introduce unemployment insurance in industry, with its undeniable evils of subsidizing the lazy and indolent, would, to my mind, merely accentuate the migration of the rural population and make the employment question a very much larger problem than it is to-day. To cope with the unemployed surplus—I believe there always will be a surplus no matter what measures are introduced—I would suggest that Government should institute centres in large industrial areas where labour could voluntarily register as unemployed, giving all essential details, and where employers could apply for labour. Obviously those centres should exchange information at stated intervals as well as report to Government. It would not be the duty of those centres to arrange for the transfer of labour from one centre to another, but they would publish lists of all demands for labour. In the event of abnormal unemployment and evident distress, Government should open test works and arrange for relief through work of a distinctly utilitarian character, as is at present done in agricultural areas in time of famine.

In this way I think Government could have its finger on the pulse of industrial life and relieve real distress at a minimum of cost without imposing any additional burden on industry, and without creating and subsidizing a class of undesirables.

8. Being a Government establishment the average length of service in the Government Press is probably greater than in private presses, still, even in the latter length of service compares favourably with that in Great Britain.

Of the numbers employed in the Government Press there are—

33	with 30 year's service and over.
62	with between 25 and 30 years' service.
78	" 20 " 25 "
148	" 15 " 20 "
219	" 10 " 15 "
289	" 5 " 10 "
371	with less than five years' service.

Absenteeism, however, is prevalent to a larger extent in India than has been my experience of labour elsewhere. During the period March to August, 1929, inclusive, the possible number of men-days was 179,431, and the number of days lost, 12,927, or an average number of persons absent from all causes of 7.2 per cent. This is due principally to illness, but there are social and other reasons. Whereas industrial workers in Great Britain generally arrange marriages to take place about the time of a holiday or are content to take a day off, in India it is common for a marriage to last a week or ten days and not only the actual participants and close relations spend this time over the festival, but also the most distantly related. Marriages in India, too, are held at definite periods of the year, and between that and the large numbers who take part a dislocation of work that is unexampled in the west is experienced.

Funerals, also, are responsible for a certain amount of absenteeism as Indians consider it a religious obligation to attend the funeral of any one in their immediate neighbourhood, whether relative or not, and among certain classes of Hindus it is a custom for a son to withdraw from society for fifteen days after the death of his father.

Another cause of absenteeism, particularly among Muslims, is the *pardah* system, as the male members of the family have to attend to such duties as taking ailing children to doctors and dispensaries and consequently have to neglect their work.

Religious pilgrimages are one more cause; and of the non-social causes one is the lack of rapid transport away from the railways and arterial roads. This is responsible for adding days to the absence of men from their work, when, to visit their village homes they have to walk many miles after getting to the nearest railway station.

There are no remedies for the social causes of absenteeism, as they are rooted in the customs of the country and only by a different attitude towards the customs by Indians themselves can a change be effected; while, of the other causes, much will depend on the growth of public conscience in matters of sanitation, preventable disease, etc., and the economic development of the country.

### III.—Housing.

16. Practically all workers, both of the Government and private presses, live in the city bazaars, under the most insanitary and unhealthy conditions imaginable. Most of them are tenants, but a larger proportion than obtains in Great Britain are either owners or co-sharers with other members of their families in the ownership of their houses. Of the workers employed in the Government Press, 396 own their houses, 158 are part-owners, and 645 are tenants.

Grants are obtainable by Government workers for the building and repair of houses under certain conditions, and those facilities are readily availed of. At the present time there are fifteen employees of the press repaying loans for those purposes. It would help to improve housing conditions generally, however, if certain specifications regarding capacity, dimensions and material, were incorporated in the agreement when a loan is granted. No control is exercised in this direction with the result that prevailing conditions are being perpetuated.

### IV.—Health.

23. The working conditions in the more important printing presses, Government and private, are good, the premises being commodious, well-ventilated, well-lit, and kept in good order. Wherever possible, electric fans and *khas-khas* screens are provided in the Government Press, and in one or two private presses, during the hot season, to reduce the temperature; and in one private press special structural arrangements have been made to reduce the temperature, not so much in the interests of the employees as the working of a process. Certain departments, however, cannot be fitted with the ordinary type of electric fan, and a system of blowing cool air through ducts and installing exhaust fans would be an acceptable improvement, while no means at all are available for increasing the temperature in the very cold months of December and January.

In the great majority of presses outside the scope of the Factories Act the conditions are deplorable, any small room or outhouse being considered good enough as a workroom.

If for no other reason than to improve the conditions in those presses, I am of opinion that the Factories Act should be amended to make the definition of a factory any premises wherein, or within the precincts of which, on any one day in the year, not less than ten persons are simultaneously employed and any process for, or incidental to, making, altering, repairing, ornamenting, finishing, or otherwise adapting for use, for transport, or for sale, any article or part of an article is carried on, whether any power is used in aid thereof or not. Under the present definition in Section 2, Clause (3) (a), there are presses which escape inspection because they work their machinery by hand and where there is overcrowding, no proper sanitary arrangements, insufficient drinking water, and old stables and godowns turned into workrooms.

I am also of opinion that ventilation should not be confined merely to the provision of doors and windows and special measures for particular industries, but that it should be compulsory for all factories to provide some mechanical means of agitating and circulating the air in the hot season. The still atmosphere of a crowded workroom in a temperature of 115 degrees, reeking with human sweat and other odours, can scarcely be considered conducive to good health or maximum productivity, and, though the latter consideration might be expected to appeal to most employers of labour, it is unlikely, on account of the original capital cost, that the use of air agitators will become general unless compulsion is introduced.

24. Government provide medical attendance for their servants free of charge, and there is a proposal at present under consideration to institute a separate dispensary in the Government Press for press employees. Two private presses provide free medical attendance, one of them providing a dispensary in addition. There are two public hospitals and several dispensaries, Government and charitable, in the city. Notwithstanding those facilities there is still room for enlargement, but an equal necessity is the educating of the people to the curative value of medicine and the need for taking early steps to get treatment, whether indigenous or western. Many have a positive dread of hospitals and resign themselves to any suffering rather than seek advice or, if they accept it, persevere with the treatment prescribed.

30. With regard to sickness insurance there can be no two opinions as to the benefits that would accrue to all concerned if a workable scheme could be devised to overcome the difficulties enumerated in subject IV (30) (iii).

The only scheme that suggests itself to me is one of levying a contribution from all employers coming under the Factories Act on a *per capita* basis on the average of the maximum and minimum of the number of the employees working on any one

day of the year. To make the levy equitable it could be permissible for the employer to deduct a fixed proportion of the levy from the workers. The total amount received from the levy should be added to by a like contribution by the Provincial Government and the whole administered by the Provincial Government, who would use the amount annually in the institution and extension of hospitals and dispensaries and the giving of grants to institutions of a like nature, whether privately owned by large firms, individual persons, or charitable organizations, and whether following the western or other system of medicine, provided the institution is certified by a competent body, appointed by Government, to be worked on proper lines. Every worker employed in a factory so levied would be issued with a registration card which would entitle him to free medical attendance and simple medicines at any hospital or dispensary maintained by Government or subsidized by a grant, with which the worker may choose to register. Any firm that provided hospital and dispensary facilities to its workers to the satisfaction of the competent body could be allowed to contract out, but safeguards should be taken on behalf of those employees who prefer indigenous systems. As regards workers who return to their native village when sick, a temporary relief card could be issued which would be valid at the nearest Government dispensary.

This scheme might commend itself on several grounds: insurance stamps and approved societies are unnecessary; all parties contribute to its maintenance, and Government are partly relieved of the present heavy burden of providing medical relief. It probably would not meet with the approval of all medical practitioners and chemists, still, as it would be optional for them to organize their own institutions, the opposition might be overcome.

#### V.—Welfare.

37. Government servants on the permanent establishment are entitled to superannuation pensions at the age of 55, on a non-contributory basis. There is, however, a large proportion of Government Press workers engaged on a temporary non-pensionable service for whom no provision is made. Three or four private presses give pensions at their discretion on a non-contributory basis.

The difficulty about instituting old age pensions generally is the fact that great numbers of persons from among the worker class have no idea of their proper age, and, in Government service, much depends on the doctor who examines the applicant when fixing age. This difficulty is common even among the young, although birth registration is carried out. Until this condition is improved and ages can be determined with some assurance of correctness it would result in chaos to attempt any scheme of this nature.

38. No private press in this province has so far instituted a co-operative society of any kind, but a co-operative bank was started in the Government Press in 1927, with a view to help the workers to tide over periods of financial stress, in times of marriage, death, sickness, etc., at a rate much lower than they can obtain elsewhere. The bank started under a shadow of suspicion, but two years' working have convinced the sceptics, with the result that the share capital has had to be increased from Rs. 10,000 to Rs. 15,000. The shares are of a value of Rs. 5, recoverable at the rate of Re. 1 the first month and eight annas monthly thereafter, and no employee may hold more than a hundred shares. A dividend of 6½ per cent. was declared the first year and 10 per cent. the following year, after making allowances for reserves, etc., in accordance with the Co-operative Societies Act. The society is managed by a committee appointed by the shareholders who meet monthly to allocate loans and conduct any business that may come before them.

A peculiarity of this society that may be of interest is a rule whereby Muslim members, who, on religious grounds, do not wish to accept interest on their shares, may hand over such sums to the Muslim members of the committee to meet the interest charges of poor Muslim shareholders who take loans. This rule has worked well and is appreciated.

#### VI.—Education.

40. The facilities for the education of the young who will eventually enter industry have been, until the past two or three years, practically non-existent, but now a measure of compulsory primary education has been introduced in Allahabad, among other places, and by a decade or so the position in this respect may be expected to show considerable improvement.

41. No provision has so far been made for industrial or vocational training in printing on a practical scale in this province. Classes in lithography and book-binding are conducted in the Arts and Crafts School, Lucknow, but, as the name indicates, they have been considered from an arts standpoint rather than the industrial, with the result that the school has made no mark on the industry and been of little practical value to the students. A scheme for practical technical training

in conjunction with workshop practice in the Government Press has been considered and, I believe, approved by Government, and only awaits funds for its institution. In this scheme it is proposed that the students should devote half their time to instruction and theory and the other half on actual commercial work produced under competitive conditions, so that the students may not be taught in an unreal atmosphere and acquire false values.

42. It is an essential feature of the scheme that the students should have passed a certain standard of education, as without it the training will not be beneficial, nor will the standard of labour be raised. No better example than the effect of education on improving the standard of living and industrial efficiency can be found than in the printing industry. The great majority of hand compositors in these parts are utterly ignorant of the English language, although English is the official language and forms the bulk of all printing. They know letters and word-forms only and literally "follow copy." The result is that mistakes are numerous—one has only to see a first proof to see how foul a proof can be—and more proofs have to be taken than would be the case in a European country, more readers have to be employed, and more time lost in corrections.

With the growth in wages and the demand for speedier work, hand composition is gradually giving way to machine composition. Except in rare cases hand compositors are not suitable for this work, because a mechanical composing machine operator must be able to read English quickly, accurately, and understandingly, in order to produce a high average output of the machine's capacity, consequently the men employed are of higher educational qualifications and their work is much cleaner. Although the unit piece-work rate for machine composition is half of the hand rate the operators are able to earn anything from Rs. 75 to Rs. 100 per cent. more than their contemporaries on hand composition. They are in every way more prosperous, and not only are they better clad and provided with the necessities of life, but they indulge in hitherto undoubted luxuries, such as cycles, in a much greater measure.

### VIII.—Workmen's Compensation.

51. I am of opinion that insurance should be compulsory in those industries to which workmen's compensation applies. Admittedly it is a matter of some difficulty, but unless it is tackled in the early stages of industrialism and in organized industries, it is going to be increasingly difficult when the schedule under the Act is extended. It is of prime importance, too, that the workmen should have some guarantee that the benefits under the Act are secured to him, otherwise awards can be made of no value by "men of straw" or if a firm ceases to function. If compulsion is introduced it may safely be left to the enterprise of insurance companies to make its benefits widely known, and I see no reason why Government, through the post office, may not offer facilities in the same way as they accept life insurance. To see that insurance is actually effected, factory inspectors could be authorized to inspect the receipts for premiums paid.

53. The scales of compensation laid down in the Act are, in my opinion, adequate, except that in Schedule IV the assumed wages should not be less than Rs. 15. Unless in the case of minors, for whom special provision has been made, a wage of Rs. 15 does not seem exorbitant when one considers that in the case of temporary disablement, for example, a worker could not get more than Rs. 7-8 a month—not a sum that is likely to engender malingering.

### IX.—Hours.

55 and 56. The normal number of hours worked in the printing industry in the United Provinces, after deducting intervals for meals, varies between 6½ and 7 hours daily on six days a week. In the Government Press the hours fixed are 8.30 a.m. to 12.30 p.m. and 1.30 p.m. to 4 p.m.

The actual hours, including overtime, but deducting intervals, are generally 8 hours daily on six days a week.

During the course of a recent discussion on a representation made by the men on the subject of their wages and certain other conditions of service, it was proposed to them that a 48 hours' week be introduced, and that the hours be so arranged as to give them a shorter day on Saturday. The first proposal was accepted and the other turned down. The representation is under the consideration of Government.

There is no system in vogue of keeping men on call longer hours than the actual working day, and these conditions apply to all workers and in private presses as well as in the Government Press.

60. The interval allowed for meals and rest, as shown above, is one hour. In exceptional circumstances, when work demands the full daily limit of 11 hours, half-hour intervals are given after five hours' work. In Allahabad, owing to the long distances that have to be traversed and no means of rapid transportation, very few men leave the precincts of the press during the interval, and either bring their food or buy it from men who are allowed entrance for this purpose.

In the Government Press holidays are granted to the industrial employees on 34 days in the year. The whole establishment is not closed down on each occasion, still they are so arranged that each community—Muslem, Hindu and Christian—enjoys 28 days in the year. All holidays are paid for to workers on fixed wages and those on task work, and, if required to work on any holiday, the hours are paid as overtime. Private presses are not so generous in the matter of holidays, though most employees enjoy holidays on the important festivals.

61. Sunday is invariably observed as a day of rest in all presses, including those publishing newspapers.

## XII.—Wages.

96. The following table shows the average wages paid in the Government Press to various kinds of workers in the years 1909, 1919, and 1929 :—

	1909.	1919.	1929.
	Rs. a.	Rs. a.	Rs. a.
Compositors, salaried .. .. .	16 13	14 8	25 3
„ piece-workers .. .. .	16 6	9 8	33 13
Pressmen .. .. .	9 0	10 1	18 7
Machinemen .. .. .	14 7	14 10	30 5
Binders, salaried .. .. .	4 15	5 8	11 13
„ piece-workers .. .. .	9 2	10 1	17 3
Lithographers .. .. .	12 1	14 13	22 10
Type-foundry workers .. .. .	6 10	7 5	12 12
Unskilled labourers .. .. .	6 0	7 0	13 0

These figures do not include overtime payments to salaried hands, averaging an additional 15 per cent.

The figures for binders are taken over the whole number employed—boys, youths and men—of whom the greater number are boys and youths doing work invariably done by girls in England and accounts for the comparatively low pay. The men employed on bookbinding proper earn from Rs. 16 to Rs. 35 per mensem.

Of the piece-hand compositors there are—

Earning more than Rs. 60 per mensem over a period of 12 months	1
Earning not less than Rs. 56 nor more than Rs. 60	.. .. 5
Ditto 51 ditto	55 .. .. 3
Ditto 46 ditto	50 .. .. 8
Ditto 41 ditto	45 .. .. 21
Ditto 36 ditto	40 .. .. 28
Ditto 31 ditto	35 .. .. 32
Ditto 26 ditto	30 .. .. 40
Ditto 21 ditto	25 .. .. 11
Earning not more than Rs. 20	.. .. .. 9

All are paid at the same rates and the differences are due solely to individual ability.

Qualified operators of mechanical composing machines earn on piece-work from Rs. 75 to Rs. 150 a month, the average being Rs. 90.

In private presses wages are slightly lower in the important establishments and considerably less in the small presses.

97. The decade 1909 to 1918 showed little or no change in the level of wages, and the figures for 1919 for piece compositors fell off owing to a considerable reduction in work as a measure of economy and an aftermath of the Great War. The considerable increase in the next decade was the result of widespread industrial unrest towards the end of 1919 and in 1920.

101. Wages are fixed by direct negotiation between the employers and the workers. Except in the large presses there are no fixed piece-rates, nor are there standard wages in any branch of the industry, consequently, in cases of monthly wages and piece-rates in small presses it is a matter for individual bargaining.



106. I am unaware of the extent of fining in private presses, but in the Government Press, with a wages bill of more than Rs. 3,00,000 a year, the average amount of fines in that period is about Rs. 90. These are inflicted for breaches of discipline. Other deductions are made for spoilage of material when caused through gross carelessness, and these again do not exceed Rs. 100 per annum.

All fines and deductions go to Government, although I am personally of opinion that fines should be placed in some fund for expenditure among the men generally.

107. The custom in the United Provinces is to pay wages monthly and the printing industry is no exception to this practice.

In the Government Press the time of the permanent establishment is made up to the last day of one month and wages paid on the first day of the succeeding month. Any adjustments are made in the following month's pay. The temporary and piece establishments are generally paid about the 10th of the succeeding month. Over-time payments are made separately about the 20th. Private presses are in the habit of paying about the 15th of the succeeding month.

I am of opinion that no legislation is necessary to regulate the periods of wage-payments as the present monthly period is well adapted to the needs of the people, who can buy their food grains in large quantities and save on the transaction, and who are more likely to save any small surplus and put it to a better purpose than would be apparent to them if the surplus was even smaller, as well as the fact that more frequent payments would increase the cost of time-keeping and disbursing staff to employers.

Legislation, however, appears desirable to prevent delay in payment, and I consider that the 10th of the following month should be the limit by which all payments should be made.

111. While I am in favour of inserting a Fair Wages Clause in all public contracts I do not see how it can be carried out until wages have been standardized, either by negotiation or by a wages board. It is certainly as much to the benefit of the employer as to the worker that such a condition should be inserted in contracts, as it protects him against the man who is enabled to undercut by paying low wages.

### **XIII.—Industrial Efficiency of Workers.**

113. Generally speaking the Indian worker in the printing industry is far below the standard of his British counterpart in efficiency. This is scarcely to be wondered at when one considers the handicap he starts off with in having little or no education. Without it he can only learn the rudiments of his work; he cannot study to improve himself or appreciate the possibilities of his craft; he lacks the urge of ambition based on sure knowledge. Few know anything of or care about the finer and more aesthetic side of their work—a high standard of workmanship and quality of output; indeed few trouble to learn how their own particular job affects or is affected by other operations. Similarly, there is a lack of pride on the part of those put in charge of machinery to see that it is kept more than superficially clean and in perfect order. Oiling is neglected, bolts and nuts are seldom tested, and defects in pitch allowed to develop, with the result that breakages occur and machinery requires repair oftener than is the case in western countries. In other words, the Indian printer is a wage-earner, seldom a craftsman.

114. There is no doubt that besides the want of education the Indian printer's efficiency is affected by poor physique and bad health brought about by insanitary home surroundings and malnutrition. He cannot be expected to have the stamina, energy, and alertness of the British worker on one, at most two, meals a day, with perhaps a few pice of sweetmeats thrown in, nor can he be expected to resist disease or to fight against petty ailments when he is surrounded by squalor and dirt.

116. The best possible method of securing increased efficiency is, in my opinion, a proper system of primary, secondary and technical education. Given that, I feel certain the other impediments to high efficiency such as poor physique, bad health, low standard of living, etc., will improve collaterally.

### **XIV.—Trade Combinations.**

117. There is no organization among the employing printers in the province. An association was mooted in 1919, when there was considerable unrest among the workers, but it never was put on a sound foundation and soon disappeared with the passing of the emergency that called it into being.

Likewise, until recently there has been no proper workers' association. One or two members of the Legislative Council, however, have interested themselves in this direction, and a union has, I understand, been formed. Whether it is to be a registered union or a union of Government servants only, or is to be both is not known, nor is it known what will be the nature of its or their activities.

### XV.—Industrial Disputes.

123. Considerable labour unrest was experienced throughout India in 1919 and 1920, partly political but principally connected with the cost of living. Allahabad shared in this unrest and strikes occurred in the Government Press and several private presses. That in the Government Press was only partial and of short duration lasting from the 8th to the 21st April, 1920, and the workers lost approximately Rs. 2,830. In the private presses also the strikes were of short duration.

In 1927 a strike took place in a private press in Allahabad over the question of certain reductions in staff and internal rearrangements, which lasted for about ten days.

Settlements were effected in all cases by direct negotiation between individual employers and representatives of the men without recourse to any conciliation or arbitration by outside persons.

124. As previously stated, every opportunity is afforded to the workers to make representations on any grievance and deputations are also received on wage and other questions as occasion may demand. The usual procedure in the Government Press is for the men to submit their petitions to the Superintendent, who, if they relate to wage increases or other changes which he has not authority to decide, forwards them to Government for orders.

Although an admirer of the work of Joint Industrial Councils in Great Britain—of which that of the printing industry is a notable example—the scheme is impracticable until both employers and workers are organized.

Until such time as Joint Industrial Councils can be created I am of opinion that there should be trade boards on the British pattern with a neutral chairman and representatives of employees and employers.

My reason for advocating trade boards is that there is undoubted sweating of labour in many establishments, particularly small presses. The method is to employ persons who have an elementary knowledge of some particular branch and to place them on small wages or very low piece-rates. These the workers are prepared to accept until they become more expert, when they either seek work elsewhere, or, should they request higher wages, are discharged. Cut-throat prices are responsible for this state of affairs more than excessive profits, therefore it is bad for all parties in the industry.

While advocating trade boards I am not unmindful of the fact that standard minimum wages cannot be fixed in the same way as they are fixed by negotiation in Great Britain, where in the printing industry all workers serve a definite apprenticeship and consequently have an average similarity in productivity, nor am I unmindful of the danger of trade boards fixing too great a gap between the gradations of progressive pay whereby youths are jettisoned when they become eligible for men's pay. To overcome this it should be an instruction to trade boards that there should not be too great a difference between the various stages, and, further, that the stages should not be fixed on age considerations only, but that length of service in the industry should be the prime qualification for advance.

### XVII.—Administration.

139. The sole remark I would offer under this head is that I do not consider the factory inspection staff adequate. Under the Indian Factories Act, XII of 1911, Section 4, Clauses (3) and (4), the district magistrate is an inspector and other officials may be appointed by Government as additional inspectors. The district magistrate has so many other duties to attend to that he must find the greatest difficulty to supplement, if ever, the visits of the regular factory inspectors. The additional inspectors are usually deputy magistrates, and from my experience I would confidently state that they perform the duties in a rather perfunctory manner, but more is scarcely to be expected as few can have had any factory experience or have devoted much time to the study of the subject.

MR. R. G. D. WALTON, I.C.S. (COLLECTOR OF CAWNPORE), COMMISSIONER  
FOR WORKMEN'S COMPENSATION, CAWNPORE.

VIII.—51. (i) The Workmen's Compensation Act has been very little used by the workmen themselves in Cawnpore in spite of the large industrial population here. I give below the number of cases instituted by employees during the last five years:— 1924, nil; 1925, nil; 1926, 1; 1927, 4; 1928, 2; 1929 (up to August 31st) 9.

Out of these all the cases in 1926, 1927 and 1928 were uncontested, and of the nine cases in 1929 only three were contested. The uncontested cases were all compromised between the employer and the employee and this is the general practice in Cawnpore. The figures show that employees very rarely resort to the Act to bring pressure to bear on their employers in order to obtain compensation, but as the figures given below in paragraph 2 show the Act gives more protection to the employee than would appear from the table above as in some cases compensation under the Act is deposited with the Commissioner and in other the employer pays compensation direct to the employee. At the same time, however, from the point of view of the workman, it is clear that the Act is little used and that on the whole he is ignorant of its existence and the advantages conferred on him by it.

(ii) It is difficult to arrive at any accurate conclusion as to the extent of the use of the Act in comparison with the extent of possible claims. I give below a table showing the number of accidents which have occurred in each year during the last five years up to and including 1928:—

Years.	Fatal.	Serious.	Minor.	Total.	Reported under the Factories Act.
1924 .. ..	5	21	105	131	—
1925 .. ..	12	54	101	167	—
1926 .. ..	5	48	117	170	—
1927 .. ..	2	26	117	145	—
1928 .. ..	8	45	106	159	—

The number of cases filed therefore as compared with the total number of accidents is negligible. But to compare them alone would be misleading. There are in addition figures available which show cases in which compensation is deposited by employers with the Commissioner under Section 8 of the Act. I give these figures below in tabular form together with the combined figures of fatal and serious accidents:—

Years.	Fatal and serious accidents.	Cases filed by workmen.	Compensation deposited by employers under Section 8, Workmen's Compensation Act.
1924 .. ..	26	—	2
1925 .. ..	66	—	7
1926 .. ..	53	1	4
1927 .. ..	28	4	7
1928 .. ..	53	2	8

It should be noted that by far the greater number of cases in which compensation is deposited are cases involving fatal accidents. If we add the total in columns two and three together as giving us the number of cases in which the Act has been

used either by the workman or the employer in the case of serious or fatal accidents we see that the use of the Act as compared with the total number of fatal and serious accidents is greater than appears at first sight though even so it is, in most years, very small. Thus in the best year, i.e., 1927 there were only eleven cases where compensation was obtained (either by workmen filing cases or by the employer depositing compensation under the Act) as against 28 cases of fatal and serious accidents. There are also figures showing cases in which employers have paid compensation direct to the workmen. I give the figures below :—

Years.			Death.	Permanent total disablement.	Permanent partial disablement.
1924	..	..	1	—	19
1925	..	..	1	6	51
1926	..	..	—	7	43
1927	..	..	—	1	35
1928	..	..	2	8	26

But it is impossible to compare these figures with the figures of the total number of accidents given above as the classification of accidents into serious and minor does not correspond with the classification laid down in the Act. Thus a certain number of cases classified under the head "minor accidents" represent cases where the workman has been absent from duty for more than ten days and which therefore came under the Act but this number is unknown and cannot be separated from the total, while on the other hand any case in which a workman is absent from duty for 21 days or over is reckoned as a "serious" accident under the Factories Act, though it may not involve permanent total or permanent partial disablement. Leaving aside these figures, therefore, it will be seen that the use of the Act by the workman himself appears to be negligible. I think there can be no doubt that the great majority of workers are, especially in smaller factories, such as small oil mills, etc., quite unaware of the advantages which the Act confers on them. In the larger concerns run on European lines it is possible that the number who are aware of the provisions of the Act is larger. Taking the industrial population of Cawnpore all round I think that the large majority do not know of the Act and that therefore there must be many cases where they do not avail themselves of its advantages at need. This ignorance is, I think, at its greatest in the very concerns where the knowledge of the Act is essential if the workman is to get compensation at all. It is I think fairly correct to say that it is only in the case of the larger concerns run on European lines (some of which at least are covered by insurance) that compensation is voluntarily deposited by the employer or paid direct to the worker in some cases. Thus the Act does not afford the protection to the worker that it was intended to do in the very concerns where he most needs it.

(iii) I have no exact information under this head. But the addition to overhead charges caused by compulsory compensation under the Act must be so small in Cawnpore as to be negligible. Even if compensation had to be paid in every one of the cases shown in the table of accidents given in paragraph 2 it is obvious that the effect on overhead charges will be insignificant. It is possible that some smaller concerns which are run in a hand to mouth fashion might feel the payment of compensation in particular cases, but the number of such concerns must be very small. The fact that some of the large concerns run on European lines do not consider it worth while to insure shows clearly that the additional cost of the Act to industry is negligible.

(iv) Insurance facilities in Cawnpore are readily available and are used to a considerable extent. Out of 54 factories 18 or 28·12 per cent. insure their employees. These 18 factories employ 17,911 workpeople or 55·5 per cent. of the total number of employees in Cawnpore. The latter figure amounts to 32,274, and thus more than half the workpeople in Cawnpore are covered by insurance. There can be no question then but that insurance facilities are readily available here. Some of the larger concerns, however, do not consider it worth their while to cover their risks by insurance as the amounts payable in any one year in respect of compensation are negligible.

Theoretically insurance facilities should obviously be useful from the worker's point of view, as some employers who might not otherwise be able to pay an award in the case of an accident or death are enabled to do so because of the fact that they are insured. But here again, I think, it is fairly correct to say that the smaller concerns which are not run on European lines and in which employers are least awake to their duties towards their workpeople and least able to bear the cost of compensation are the very ones which do not avail themselves of insurance facilities to any great extent. It is, generally speaking, larger concerns run on European lines, which could in any case afford payment of compensation, that do use the facilities of industrial insurance.

(v) It seems fairly clear that the difficulties which would attend the application of any scheme of industrial insurance to organized industries effectively forbid compulsory insurance. The only way in which the workers can be benefited is by adding other classes of workers to Schedule II of the Act, e.g., such workers as the now numerous class employed on such occupations as paid motor-drivers and also workers employed on constructional engineering works might well be added.

52. This question is covered by the paragraph above.

53. (i) I think that the scales of compensation should be enhanced. The two lowest grades of assumed wages in Schedule IV of the Act are too low, at any rate for Cawnpore, and are obsolete. The minimum assumed wage for Cawnpore should be at least Rs. 12.

(ii) The question has been raised as to whether the list of dependants entitled to receive compensation in the case of the death of an employee is sufficiently comprehensive. I am of opinion that it might be enlarged to include widowed sisters and widowed daughters. Further question has been raised as to whether proof of dependence should be required in order to enable a relation to claim compensation. In my opinion it is better strictly to define the list of those relations who are entitled to claim compensation than to make proof of dependence necessary. Finally I think it would be wrong in principle to make compensation vary with the number of dependants. Compensation is based on the rates of wages and these in turn are based on market conditions and not on the number of children or other dependants that a particular workman may have. It would in practice be very difficult to assess the extent of dependence on the deceased workman and I think that the present method should be adhered to.

At present no period under ten days counts to qualify for compensation under the Act. It is impossible to assume how many cases there are in which a man is absent for say, a week, but gets no compensation. The figures given in the first table in paragraph 2 do not help here as "minor" accidents include any accident which involves absence from work for more than 48 hours and less than 21 days. It is impossible to say how many of these fall below the ten days' absence required under the Act. The reduction of the period of waiting of ten days would inevitably lead to an increase in the number of cases and probably to an increase in malingering but some system of dating back would meet most of the cases involving hardship.

(iii) *Industrial diseases.*—My register shows no case of such a disease having occurred in Cawnpore. The only important industrial diseases are anthrax and white lead poisoning. There is no trade involving the latter here. There has, however, been a case of anthrax in the trades such as woollen manufactures, the hide and skin trades and brushware manufacture in which it occurs, in Cawnpore.

(iv) The Commissioner for Workmen's Compensation Act in Cawnpore is the Collector. Up to the present no difficulty has arisen in the administration of the Act. This is due to the fact that the number of cases have been very small and they have all been of a simple nature. As has been remarked above most of them were settled by the parties and the cases withdrawn. If, however, the scope of the Act was largely increased and the number of cases became greater there might be difficulties. This would apply, too, if complicated cases came up for decision as the Collector is not an expert in such matters. It might therefore, be desirable to introduce a provision to enable the Commissioner to sit with assessors if he so desires to decide a particular case.

As regards the administration of awards, etc., there has been no difficulty hitherto. The prescribed registers are kept up by the ahimad of the collector's court and as the number of cases has been very small he is easily able to deal with this work. If the suggestion that provision should be made in the Act for payment of awards in instalments were largely adopted it is possible that the burden of work would become greater, but this could easily be met by appointing an extra clerk.

(v) The question as to the extent of knowledge by the worker of the benefits conferred on him by the Act has been touched on above. I think, however, from the little experience I have had of the Act and from the figures given above, such as they are, that workpeople are in many cases not aware that they can claim compensation for injuries or death. I think that to some extent this might be met by empowering the Commissioner to initiate proceedings on his own motion and also on information received. At present reports of accidents are made to the district magistrate and are filed in his office. I see no reason why the Commissioner under the Act should not be allowed to use the information thus gained by him as a district magistrate in order to protect workers. This could to some extent be secured if the Commissioner were empowered to initiate proceedings. He might then, after the lapse of a reasonable period, and after the filing of the report of an accident, call upon the employer to furnish information as to whether any compensation has been paid or not, and if not, could direct the workman to apply in his court, if he so desired. If this were considered an undesirable method of procedure there is no reason why inspectors of factories should not be authorized to prefer complaints in cases where they believe that a workman has been killed or injured in circumstances giving rise to claim for compensation where no compensation has been deposited. Inspectors of factories are often in a position to know that compensation has not been deposited, as they inspect factories frequently and so come in contact with workpeople and also because reports of accidents are sent to their office as well as to that of the district magistrate by employers. At present the Chief Inspector of Factories ordinarily draws attention of workpeople who have been injured to the Act, and in one recent case a man applied in my court as a result of such advice. I see no reason why the Chief Inspector of Factories should not be regularly empowered to do this and to report to the Commissioner if the latter was empowered to initiate proceedings on such a report or on his own knowledge that compensation had not been paid. It is in the small concerns such as small oil mills, etc., that the workpeople are most ignorant of the advantages conferred on them by the Act and where they stand most in need of protection.

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Mr. W. G. MACKAY, M.B.E., CHIEF INSPECTOR OF FACTORIES AND BOILERS, UNITED PROVINCES.

(Much of Mr. Mackay's memorandum is embodied in substance in the Government memorandum and is not printed here.)

**I.—Recruitment.**

3. (i) Factory labour is usually recruited at the mill gate. When additional men are required the fact is communicated to the existing employees who bring their friends or relations. Jobbers and headmen or supervisors also make known the fact in the bazaars and *bustis*. In the case of cotton ginning factories, which are seasonal, a large proportion of the work is done by a contractor, who usually collects his labour from the surrounding villages. This is all casual labour which is invariably paid off daily.

(ii) The existing system has, it is believed, worked satisfactorily in the past and no reports of shortage of labour have been received from the factories. I have no suggestions to offer.

(iii) *Public Employment Agencies*—(a) *Desirability of establishing*.—I do not think they are either necessary or desirable.

(b) *Possibility of practical scheme*.—It is doubtful whether any practical scheme which would be free from abuse is possible.

4. No statistics are available to show the extent to which family life is disturbed due to workers leaving their families behind when they migrate to industrial towns.

The statement in Appendix J shows that about two-thirds of the workers of this mill have their families with them, but this is probably due to the fact that housing is provided for a large proportion of them, in most other cases the ratio would be reversed.

The greatest disturbance occurs in the larger towns and cities. It is also much greater in the *bustis* than in organized labour settlements.

7. (i) *Industrial unemployment in a general sense as understood in European countries does not exist.*

A small portion of the industrial population is at times unemployed for short periods due to occasional slackness in trade in particular industries ; these, however, are soon absorbed in other concerns.

Some 10 per cent. of the labour force of this province is employed in cotton ginning and pressing factories for about four months in each year. The bulk of these are agriculturists who work in the factories to supplement their income and return to their fields and villages at the close of the season. This also applies to the majority of sugar factory employees.

The term "unemployment" can hardly be applied in these cases as the people only change from one occupation to another.

(ii) *Extent to which caused by—(a) Retrenchment or dismissals.*—The extent to which it is caused by the above reasons is believed to be very slight indeed.

(b) No definite information is available regarding the causes or extent of unemployment but the extent to which it is caused by voluntary retirement is believed to be negligible.

(c) In times of famine there is acute unemployment in the rural areas, which causes a large influx to industrial centres in search of work.

It is the practice of Government on such occasions to open relief works on which large numbers are given temporary employment to tide over their difficulties.

(iii) As stated above, no acute distress is believed to exist except in times of famine, to cope with which Government take suitable measures.

The question of unemployment is closely connected with the state of industry and trade generally.

Broadly speaking, the fostering of new industries and the expansion of existing ones would help towards this end.

(iv) *Unemployment insurance.*—This subject has not been considered, but in view of the facts ascertained in connection with the proposed sickness insurance scheme, I doubt if at the present stage of industrial development it would be practicable.

(v) *Application of international conventions relating to unemployment.*—In view of the fact that general unemployment is not yet a feature of the industrial system of this province, there does not appear to be any necessity of applying the conventions.

The transference of labour from one district to another for employment in seasonal factories has been considered.

The manufacturing season in the case of tea factories is from April to November, while that of cotton ginning and sugar factories is generally from September to March.

The interchange of labour between these industries would appear possible, but I doubt very much if it is a practical proposition as the bulk of the labour employed in these factories consists mainly of agriculturists who only work in the factories to supplement their income, and also in view of the fact that ample labour exists in the various cotton ginning centres to meet the needs of those factories.

18. (i) The following statement shows the average duration of employment for two separate classes of labour in six different industries :—

<i>Average duration of Employment.</i>					
Class of Industry.				Skilled and semi-skilled labour.	Unskilled labour.
Engineering works*	..	..	..	3.5 years	2.25 years
Flour mills	..	..	..	5 "	5.5 "
Oil mills	..	..	..	10 "	3 "
Tanneries	..	..	..	7.5 "	4.75 "
Printing works	..	..	..	5.5 "	1.5 "
Textile factories	..	..	..	6.5 "	3.75 "

Many of the factories had not kept any records of the number of years that their workers had been in their employ, and it was with considerable difficulty that the above figures were obtained from about half a dozen of each class of factory.

The above represents the averages obtained for some fifteen thousand workers. The average duration of employment varies from over thirty years to a few months and many of the Cawnpore mills have men who have been in their employ all their

\*Excluding railway workshops.

lives. In a large Government leather factory in Cawnpore some 250 men, about 12 per cent., had nearly thirty years' service, while in a local cotton spinning mill over 85 per cent. of the workers had a minimum of twenty months' service.

(ii) Casual labour in perennial factories more or less varies from 2 to 3 per cent. of the total number of employees, but in a Government leather factory in Cawnpore it is stated to be as high as 17 per cent., which is unusual.

In seasonal factories it is very much higher, particularly so in cotton ginning and pressing factories, where anything from 50 to 75 per cent. of the labour is casual, and seldom, if ever, work in the same factory throughout the season.

(iii) *Absenteeism.* (a)—A statement of absenteeism and wages lost for two classes of workers in six different industries is attached as Appendix K.

This statement has been compiled from the monthly averages of some 18,000 workers, and is therefore fairly representative.

The average percentage of absenteeism based on the days lost compared with the possible number of working days varies from 2 to 9 per cent. in the case of skilled and semi-skilled labour, and from about 2 to 6 per cent. for unskilled labour.

A column has been included in the statement to show the percentage of the staff that on an average absent themselves during the month. For skilled and semi-skilled labour it varies from 20 to 50 per cent. of the staff while for unskilled labour it is 27 to 63 per cent.

In the case of skilled workers permission is usually obtained before absenting themselves, but in the case of unskilled labour it is frequently otherwise.

Overstaying of leave granted is a fairly usual occurrence.

The causes that lead to absenteeism are numerous. No definite statistics are available, but some of the chief causes are sickness, social events and agricultural or similar work at home.

(b) *Seasonal or otherwise.*—No statistical records relating to this are available, but it is a well-known fact that absenteeism is greater during the harvest and marriage seasons.

(c) *Time and wages lost.*—This has been indicated in Appendix K attached.

For skilled and semi-skilled workers the average number of days lost per month varied from 2 to 9 per cent., and the wages from Rs. 24 to Rs. 2,912. For unskilled workers the average varied from 2 to 6 per cent., and the wages from Rs. 14 to Rs. 364.

## II.—Staff Organization.

15. *Contractors as intermediaries.* (i) Building work and the manufacturing of tents and *durries* are mostly done by contract, also unloading consignments, hand shunting wagons, removal of cinders and ashes, the manufacture of brass buckles, studs, etc., for harness equipment, casting work in small foundries and the manufacture of locks, fittings, date stamping dies, etc., in the postal workshops, Aligarh. Also in cotton ginning and pressing factories, about 75 per cent. of the work is done by contract labour.

(ii) The extent of sub-contracting has never been investigated, the practice is, however, known to be common, particularly in the building trade and for the manufacture of locks. Frequently the main contract is parcelled out and allotted to a number of sub-contractors.

(iii) Where the work is done on the factory premises, adequate control is exercised by the chief employer and the factory inspectorate. When the work is taken out, however, no control exists, as often the work is done in the worker's home, where not infrequently he is assisted by members of his family.

(iv) *Effects of the contracting system.*—(a) *On industry.*—Is to lower the cost of production. The rates paid are frequently very low and the contractor or sub-contractor is usually the gainer.

(b) *On the worker.*—It engenders a certain amount of independence and self-reliance, and a good worker can sometimes earn a fair wage, but in most cases it is detrimental, as very low rates and sweating are not uncommon, the work too is often done in small lots in scattered uncontrolled premises which are neither sanitary or hygienic.

## IX.—Hours.

57. *Effect of the 80 hours restriction.*—(i) *On the worker.*—It has given him a shorter working day and more leisure hours for recreation, etc.



It has eliminated a certain amount of loitering and the efficiency of the piece worker particularly has improved, as he necessarily must work more steadily and quickly in order to earn his usual wage.

(ii) *On industry.*—The Act of 1922 limited the working hours of all classes of factories to 60 per week; prior to this textile factories only were limited to 12 hours per day (72 hours per week), no limit being placed on the other classes. Comparison is therefore only possible in textile factories, and even here it is not possible to be strictly accurate, as the efficiency of both machines and operatives have in many cases altered, also the class of goods manufactured.

The opinions of mill managers differ on this question, some are of opinion that the reduction to 60 hours per week has not made any considerable difference in the output of the mill, due to the fact that a good deal of the loitering which formerly existed having been eliminated by stricter supervision. Others again maintain that the production has definitely decreased as a result of the reduction in working hours. The following figures from three local mills are given in support of this latter contention :—

*Mill "A."*

*Outturn per spindle per half-year.*

		1919	1929
Waste yarn	.. ..	198.7 lb.	167.6 lb.
		1919	1928
Ordinary yarn	.. ..	736.3 hanks	717.7 hanks

*Mill "B."*

*Waste mules spinning.*

1921	.. ..	68,223 lb. production
1922	.. ..	67,961 "
1923	.. ..	53,497 "
1924	.. ..	57,258 "
1925	.. ..	56,869 "

*Mill "C."*

*Production in Weaving Department.*

Year.		Number employed in mill.	Production per loom. lb.	Production per man employed. lb.
1921	.. ..	2,904	308.61	157.07
1922	.. ..	2,865	320	162.28
1923	.. ..	2,886	288.26	146.22

The figures for Mill "B" are probably the most accurate for comparison purposes, as it is definitely known that no change either in the machinery, or class of goods made, took place during these years.

If the production figure, 68,223 lbs., is reduced in the proportion of 12 is to 10, the resultant figure is 56,852 lb. which is practically the same as those for 1924 and 1925, but slightly greater than 1923.

The average production for the years 1923, 1924 and 1925 is 55,875, which is a reduction of 18.1 per cent. on that of 1921.

The working hours were reduced from 72 to 60 per week, which is a reduction of 16.66 per cent.

The conclusion arrived at is that the 60 hours restriction has been adverse to industry, as the production has decreased more or less in the same proportion to the reduction in working hours.

58. The effect of the daily limit will be similar to 57 above. I would like to mention, however, that though the daily limit is 11 hours per day in practice it does not usually exceed 10 hours as the factories work six days a week.

The only occasions on which it is sometimes used is when Sunday and Monday are holidays, the working hours then being increased to 11 per day or 55 hours for the week. This is however seldom done, and I think the limit might be reduced to 10 per day.

59. Reduction of working hours is possible at the cost of production. The piece-worker's earnings would be affected as he probably could not increase his efficiency sufficiently to enable him to earn the same wage as at present, which would lead to a demand for higher wages and possibly serious labour troubles as would probably also any move on the part of the employers to reduce the time-workers wages in relation to the shorter working hours.

60. *Intervals.*—(i) In factories working 10 hours a day, the mid-day interval of one hour is usually given after five hours' work, but in some cases it is arranged so that 6 hours' work is done before the interval and 4 hours after it, to allow for the meal time to be about mid-day. Other divisions of time such as  $5\frac{1}{2}$  and  $4\frac{1}{2}$  hours and  $4\frac{1}{2}$  and  $5\frac{1}{2}$  hours are also sometimes adopted to suit the starting time of the factory which is usually half an hour to an hour earlier in the summer months. Where the working hours are shorter, the periods before and after the interval are correspondingly less.

(i) (a) The suitability of the intervals in relation to fatigue has never been closely investigated, but from personal observation of men leaving the factories at the mid-day interval it would appear to be suitable, as none were noticed to be visibly fatigued.

In 1927 an analysis of the times of accidents was made with a view to ascertain whether fatigue was responsible, as it was suspected that a larger number of accidents occurred towards the latter end of the working day. The analysis however entirely disproved this. The whole day from 6 a.m. to 6 p.m. was divided into four 3-hourly periods. The greatest number of accidents occurred between 9 and 12 and the next greatest between 12 and 3, while the least occurred during the last 3 hours of the day, as will be seen by the statement below:—

6 a.m. to 9 a.m.	9 a.m. to 12 mid-day.	12 mid-day to 3 p.m.	3 p.m. to 6 p.m.
235	388	346	222

(i) (b) The arrangement is suitable in relation to the workers' meal time, in fact it is in view of the meal time that the factories arrange the various sub-divisions of time before and after the interval instead of balanced periods of five hours each.

(ii) The law, Section 21 of the Act, is suitable and provides for, at the request of the employees, two periods of rest of half an hour instead of one of one hour.

(iii) Yes, the hours during which the factory is working are suitable.

(iv) Government factories get all gazetted holidays, about 30 days in the year (not including Sundays). Private concerns allow a full day off on all the more important Hindu and Muhammadan festivals and a half holiday on the less important ones: these number about 14 and 7 respectively.

62. The exempting provisions under Section 30 (1) of the Act are made full use of when necessary. Although no time limit is placed on exemptions under this subsection, they are periodically examined and curtailed when the circumstances justify it. This was done last year. Those under Section 30 (2), which are of a temporary nature and intended to enable factories to deal with an exceptional press of work, have of recent years been sparingly given and only after full enquiry into the merits of each case. The number of exemptions granted under this subsection was reduced from 11 in 1925 to 1 in 1928.

## X.—Special Questions relating to Women, Young Adults and Children.

### A.—Factories.

\* 82. Infants are not permitted in the factory proper unless they are kept in a specially provided creche. In cotton ginning and tea factories which are seasonal factories and in which over 60 per cent. of the female labour is employed, women workers are allowed to bring their infants into the compound provided they do not enter the factory building where machinery is being used.

This is allowed as it would be very difficult for the women workers to arrange for some one to look after their young children at home while they were at work. It is probably better too for the children.

Section 19 A of the Act empowers the inspector to prohibit the presence of young children in a factory.

83. The regulations for women's work are suitable except that, I think, the daily limit of 11 hours per day might be reduced to 10. The intention of the legislature in framing Sections 24 and 28 of the Act, was, it is presumed, to provide for, at the employer's option, an 11-hour day for five days and a half day (5 hours) on Saturday.

In practice however all factories working 60 hours per week, work 10 hours a day for six days. From the statement given below it will be seen that about 75 per cent. of the factories employing women work over 54 hours per week, and as very few of them work a 9½-hour day, it can safely be said that practically all of them work a 10-hour day for six days a week.

Number of factories in which the weekly hours of women are :—

Year.	Not above 38.	Above 48 but not above 54.	Above 54.
1926 .. ..	18	16	131
1927 .. ..	15	15	138
1928 .. ..	12	17	137

84. (i) The regulations for the hours of work and intervals of children are suitable. In the majority of factories children are worked between 30 and 36 hours per week, vide statement in Appendix C attached.\*

(ii) The minimum and maximum ages, twelve and fifteen years respectively, for children are suitable.

85. Double employment of children is prohibited by Section 25 of the Act. It does not occur in this province.

86. *Young Adults (presumably those between 15 and 18 years of age).*—Section 19B of the Act prohibits their employment in certain processes, and Part II of the schedule of the above section regulates their conditions of work in certain processes. A definite system of apprenticeship prevails in railway workshops where youths receive a sound training in the various manufacturing, repairing, and erecting departments of these works. The Government technical schools in the province provide training courses in engineering, wood-working, etc., and also conduct evening classes which are attended by apprentices from the railway workshops and others.

The larger factories such as cotton and woollen mills, electric power stations, harness and saddlery, boot and engineering works, also tanneries and sugar factories, all take in a certain number of apprentices for training in some particular branch of the industry.

89. (i) Only one factory has been notified under section 2 (3) (b) of the Act by the local Government.

(ii) It is not considered advisable to extend the application of this sub-section unless an adequate inspecting staff is first provided, as the object aimed at in notifying smaller premises would be defeated unless they could be frequently visited and properly controlled.

The above would, however, not apply in the case where it was considered that the conditions were obviously such that notification was necessary.

## XII.—Wages.

96. (i) *In Industry.*—A statement has been attached as Appendix L, which shows the average monthly earnings for 22 classes of labour for the past ten years.

These rates are those which have been published as average rates for the whole province in the Administration Report of this department each year and the material for their compilation is obtained from the various factories in the form of annual returns.

The accuracy of these returns is in many cases very doubtful and considerable variation often occurs between the rates of similar classes of labour in the same locality and industry. Similarly the various designations do not always have the same value, for example, an engine driver in a large mill is an employee of very different importance to his prototype in a small seasonal factory. The method of averaging adopted is also an unsound one.

It is with some diffidence therefore that the statement is given as I do not consider it to be a true index of the earnings of the various classes though it perhaps might have some value in indicating the variations in recent years.

(ii) No definite information is available regarding agricultural labour wages, but broadly speaking they are seldom if ever so high as those paid by industries.

97. (i) *Increases and Decreases.*—The only basis of comparison available is the ten-years' statement of wages which, as previously explained, is not considered accurate.

This statement shows a pronounced all-round rise in the year 1920. Fitters' wages rising from Rs. 32 to Rs. 36, blacksmiths' from Rs. 26 to Rs. 32, carpenters' from Rs. 25 to Rs. 31 and that of the workshop coolie from 13 annas to 16 annas.

Between 1920 and 1928, the advance was maintained in many cases though in 1926 there was a slight decrease in the wages of firemen, fitters, weavers, dyers and workshop coolies and in the following year there was a slight decline in some of the other classes but the wages of weavers regained their former position. The wages of the workshop coolie which reached their zenith in 1921-22 have since steadily declined.

(ii) The high cost of living prevailing in the latter years and after the termination of the war was probably the main cause of the sharp increase in 1920.

The reduction of working hours to 60 per week in 1922 does not appear to have appreciably affected the position.

(iii) The reasons for variations appear closely related to the cost of living particularly in the case of workshop coolies, i.e., unskilled labour, but here again the figure for 1914 can only be accepted with reservations as its accuracy is doubtful.

	1914.	1921.	1928.
	Rs.	Rs.	Rs.
Wage of workshop coolie .. ..	9	17	14

(iv) *Relation to Profits.*—I have no information on this point but it would appear obvious that the margin of profit expected or obtained in an industrial concern would influence both the raising or lowering of the wage rate within limits.

102. Overtime from the point of view of the Factories Act is work over 60 hours per week which is only permitted where Government have granted an exemption from section 27 of the Act.

In such cases all work over 60 hours is required by section 31 of the Act to be paid for at least at one and a quarter the normal rate. Where the normal working hours plus overtime does not exceed 60 hours per week the payment of overtime is optional, but in such cases it is usually paid at ordinary rates. When Sunday is worked in lieu of a substituted holiday the ordinary daily rate is invariably paid.

107. *Periods of wage payments.*—(iii) *Desirability of legislation*—(a) *To regulate periods.*—This was enquired into in 1925 when it was found that there was no general desire for weekly payments.

Both those who were paid monthly and fortnightly appeared to be satisfied with the respective systems, and it was considered that there was no justification for interfering with the mutual agreements arrived at between employer and employed in this respect.

(b) *To prevent delay in payment.*—This too was considered at the same time, but as the demand for statutory enforcement was not strong and in view of the expense that would be involved in enforcing the law legislation was not introduced.

Personally I consider it desirable that a maximum period should be fixed by law as I think it unreasonable that any employee should be required to wait longer than a week for wages that have been earned.

110. *Annual or other leave.*—(i) *Extent to which taken by workers.*—In Railways and in several industrial concerns ten to fifteen days' leave on full pay is allowed. This is said to be fully utilized.

No definite period is fixed for leave without pay which is frequently taken in connection with social events such as marriages, births, deaths, etc., also in the case of sickness or private affairs.

It has not been possible to obtain very much detail regarding the extent to which leave is taken by workers but from enquiries made at a large local mill employing over two thousand persons and where fairly reliable records are maintained, it was ascertained that nearly 47 per cent. of the employees on an average take leave.

This concern however has a large housing settlement and a large permanent labour force consequently the percentage is likely to be higher elsewhere. The statement of "Absenteeism" attached to chapter I gives some indication as to the extent which workers absent themselves with or without leave.

111. *Desirability of fair wage clause in public contracts.*—My experience of public contracts is very limited, but I think there would be some difficulty in deciding what is a "fair wage" and that unless a precise figure is stated the clause would be of little or no value.

#### **XVI.—Law of Master and Servant.**

128. *Types of contracts commonly in use.*—The superior supervising staffs in factories are usually employed under a written contract or agreement signed by both parties, in which the terms of employment, wages, leave, medical attendance, housing, etc., are stated, and in the case of imported European staff free passages both ways are invariably given.

Workmen generally do not sign any written contract. Some of the larger organized concerns have rules and terms of employment which are shown to workmen, or read to them if illiterate, when first employed, and they are required to agree to accept and abide by them.

An instance is on record however where workmen are required to sign an undertaking not to go on strike without notice.

This is exceptional and was only resorted to after a lightning strike.

In the large majority of cases there is nothing more than a verbal agreement between master and man.



**APPENDIX F.**  
*Statement of housing accommodation provided by employers at Caunpore.*

Name of factory and settlement.	Number of persons employed in the factory.	Number, size and average rent of tenements.										Remarks.	
		Single-room tenements.			Double-room tenements.			Larger tenements.					
		Number.	Size.	Average rent.	Number.	Size.	Average rent.	Number.	Size.	Average rent.			
Allenganj .. ..	7,555	816	8' × 10'	{ 1 2 1 10	74	2 × 8' × 10	{ 3 4 4 0	4 in { each.	Two rooms each 12' × 12' One room 6' × 6'	Rs. a. 12 0	65	3,160	In the majority of cases the quarters have verandahs attached and many have private court-yards.
MacRobertganj ..		655	12' × 10'	1 12	140	2 × 10' × 12'	{ 5 10 9 8	12 in { each.	One room 21½' × 14' Two rooms each 14' × 10' One room 10½' × 6' Do. 5' × 7'	17 0	55	2,652	
MacRobertganj extension.		21	12' × 10'	2 8	—	—	—	—	(1) 17' 6" × 9' 9' × 8' 8" 6' 5" × 11' 5" (2) 11' 7" × 10' 7" 11' 10" × 6' 3" 16' × 25'	4 0	—	50	
Juhi Kakomiganj ..		{ 176 8 79 46	{ 11' 6" × 9' 9' 2" × 9' 8' 3" × 9' 9' × 9'	{ 2 0 2 0	2	Two rooms each 9' 2" × 9'	4 0	2	—	—	—	900	
Juhi chaprasi quarters Lachmanpurwa ..		12 68	10' 5" × 9' 9' × 8½'	2 0 1 8	—	—	—	—	—	—	—	200	
Deputy-ka-Parao ..	—	—	—	{ 6 8 6	All 15' × 12'	{ 6 0 7 8 12 0	10	15' × 12' with some small supplementary rooms.	15 0	—	129		
Cooper Allen and Company. Cawnpore Wool- len Mills. North West Tannery. Cawnpore Cotton Mills Elgin Mills Company, Limited. Elgin Settlement ..	{ 28 5 23 9 44 85 22	{ 10' × 9' 10' × 10½' 9½' × 10' 8½' × 9' 10' × 10' 9' × 7' 10' × 10'	{ Free Do. Do. Do. Do. 1 2 1 8	— — — — — 14	— — — — — 10' × 12'	— — — — — 3 8	— — — — — —	— — — — — —	28 5 32 44 —	559	345		

British India Corporation Limited.

[illegible]

the British India Corporation Settlements practically all have verandahs and all the single quarters and more than half the double ones have private courtyards attached.



## APPENDIX J.

*Statement of recruitment, service and contact with villages of employees of a typical Cawnpore mill.*

District.	Number of employees.	Percentage of Staff.	Returned to villages during the year.		Average years service.	Number living.		Number of men living.	
			Number of men	Number of times returned.		In settlement.	Outside.	With family.	Without family.
Agra .. ..	6	·34	2	3	6·73	5	1	5	1
Aligarh .. ..	8	·46	4	5	6·54	2	6	6	2
Allahabad .. ..	25	1·40	11	18	7·99	12	13	13	12
Azamgarh .. ..	52	2·91	27	32	7·13	39	13	23	29
Bahraich .. ..	3	·16	1	1	7·83	1	2	3	—
Budaun .. ..	1	·06	1	1	6·75	—	1	1	—
Banda .. ..	9	·50	6	6	7·22	1	8	9	—
Bara Banki .. ..	70	3·93	34	51	6·46	24	46	39	31
Bareilly .. ..	2	·12	1	1	4·50	—	2	2	—
Basti .. ..	1	·06	—	—	6·00	—	1	1	—
Benares .. ..	3	·16	1	1	9·62	2	1	2	1
Bundelkhand .. ..	7	·40	3	3	10·60	1	6	5	2
Cawnpore .. ..	448	25·18	111	255	9·42	127	321	328	120
Etah .. ..	4	·22	3	4	7·37	—	4	3	1
Etawah .. ..	22	1·23	14	23	6·91	8	14	13	9
Fyzabad .. ..	81	4·54	44	62	7·15	49	32	47	34
Fatehpur .. ..	46	2·58	32	68	9·25	28	18	26	20
Farrukhabad .. ..	64	3·58	40	65	8·13	15	49	38	26
Gonda .. ..	61	3·42	31	42	6·34	36	25	33	28
Gorakhpur .. ..	2	·12	—	—	12·87	2	—	2	—
Hamirpur .. ..	7	·40	5	7	19·08	—	7	7	—
Hardoi .. ..	73	4·10	38	68	7·31	42	31	44	29
Jalaun .. ..	67	3·77	32	49	8·07	6	61	59	8
Jaunpur .. ..	95	5·33	40	50	7·75	54	41	42	53
Jhansi .. ..	59	3·31	22	30	7·92	3	56	51	8
Lucknow .. ..	35	1·96	16	40	15·65	18	17	28	7
Lakhimpur .. ..	3	·16	1	1	3·00	1	2	1	2
Mainpuri .. ..	5	·28	3	6	12·08	—	5	4	1
Meerut .. ..	2	·12	—	—	12·00	1	1	2	—
Mirzapur .. ..	4	·23	3	4	9·62	2	2	3	1
Moradabad .. ..	3	·16	1	1	7·81	2	1	1	2
Muttra .. ..	1	·06	—	—	12·50	1	—	—	1
Orai .. ..	1	·06	—	—	3·25	—	1	1	—
Partabgarh .. ..	31	1·73	15	21	6·45	14	17	13	18
Pilibhit .. ..	2	·12	1	1	4·00	—	2	2	—
Rae Bareli .. ..	158	8·87	104	179	6·84	98	60	75	83
Shahjahanpur .. ..	5	·28	1	1	15·18	4	1	3	2
Sitapur .. ..	37	2·07	27	44	6·20	12	25	17	20
Sultanpur .. ..	32	1·79	20	32	12·75	19	13	14	18
Unao .. ..	227	12·75	163	474	7·38	108	121	113	114
From outside the Province.	18	1·02	5	12	12·1	7	11	11	7
Total .. ..	1,780	100·00	863	1,661	8·5	742	1,038	1,090	690

## APPENDIX K.

## Statement of absenteeism and wages lost.

Average for—	Skilled and semi-skilled.					Unskilled.				
	Percentage of the staff who are absent for one or more days in a month.	Possible total no. of working days in the month.	Total no. of days lost due to absence.	Percentage absenteeism.	Wages lost.	Percentage of the staff who are absent for one or more days in a month.	Possible total no. of working days in the month.	Total no. of days lost due to absence.	Percentage of absenteeism.	Wages lost.
Engineering works*	..	44 per cent.	5,000	100	2 per cent.	57 per cent.	4,476	98	2.2 per cent.	Rs. a. p. 55 4 0
Flour mills	..	20 "	1,817	39	2.1 "	27 "	802	28	3.3 "	15 14 0
Oil mills	..	32 "	2,172	94	4.3 "	42 "	1,980	112	5.7 "	53 6 6
Tanneries	..	44 "	4,366	406	9.3 "	42 "	2,077	120	5.8 "	49 0 0
Printing presses	..	59 "	3,340	191	5.7 "	63 "	765	35	4.6 "	14 7 0
Textile factories	..	30 "	53,570	3,245	6 "	33 "	12,499	787	6.3 "	364 3 0

\* Excluding Railway workshops.

## APPENDIX L.

*Rates of wages printed in the annual reports for the past ten years.*

Class of labour.	Average amount per month.									
	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<b>1.—Skilled labour.</b>										
Engine driver ..	29	32	34	34	35	35	40	40	41	40
Fireman .. ..	20	24	24	26	23	25	24	23	23	23
Oilman .. ..	—	—	—	—	—	—	—	16	17	16
Fitter .. ..	32	36	39	38	38	42	44	42	42	41
Turner .. ..	—	—	—	—	—	—	—	39	42	40
Rivetter .. ..	—	—	—	—	—	—	—	28	27	29
Boilersmith ..	—	—	—	—	—	—	—	35	40	37
Blacksmith ..	26	32	34	36	36	37	35	35	36	36
Moulder .. ..	—	—	—	—	—	—	—	34	36	35
Carpenter .. ..	25	31	32	34	34	35	34	34	34	34
Mason .. ..	21	25	28	28	28	30	30	29	29	30
Compositor (printer)	—	—	—	—	—	—	—	26	26	30
Machinist (printer)	—	—	—	—	—	—	—	29	27	33
Weaver (male) ..	25	32	32	36	31	31	33	31	33	33
Spinner (male) ..	26	28	28	28	26	29	29	29	26	25
Dyer (textile) ..	15	22	23	22	23	22	23	19	17	20
Reeler (male) ..	—	—	—	—	—	—	—	23	20	20
Reeler (female) ..	—	—	—	—	—	—	—	17	16	15
<b>2.—Unskilled labour.</b>										
Coolie or opener ..	—	—	—	—	—	—	—	18	16	16
Coolie (male) on gins	—	—	—	—	—	—	—	17	14	15
Coolie (female) on gins.	8	10	11	11	10	10	10	11	11	10
Coolie (workshop) ..	13	16	17	17	16	16	15	14	14	14

*Note.*—The averages are simple arithmetical means of reported rates and have not been weighted for numbers.

RAI BAHADUR BABU BRIJ LAL, B.A., DIRECTOR OF LAND RECORDS,  
UNITED PROVINCES.

### Introductory.

The writer of this note has no connection with any "industrial undertaking" except that he is the Provincial Superintendent under Act VI of 1901, which regulates emigration to the labour districts of Assam. He has, however, never had an occasion to visit these districts and consequently does not possess first-hand information of the conditions in which labourers work there. Any views expressed are his own and are not necessarily those of the local Government.

### I.—Origin of Labour.

3. *Methods of recruitment.*—(i) *Existing methods.*—There is no organization for recruitment of labour for industrial concerns, nor is any recruitment controlled except that for Assam. For Assam the actual labourers in employ there come back as garden sardars and recruit others by means of their own example. A new recruit is registered by the local agent, appointed under section 64 of the Assam Labour and Emigration Act, previous to departure. Whenever an adventurous labourer is out of employment and he comes in contact with a relative or friend of his who is better off outside he also goes out in search of employment there and takes any job that he can get. The needs of the mills or industrial concerns are ordinarily satisfied in this way, or in cases of shortage of labour they also send out their trusted old labourers to advertise the advantages of employment in their concern and bring in fresh recruits.

(ii) The above method of recruitment is almost an ideal one ; the only prospect of its improvement lies in a greater publicity and advertisement of the improved prospects of the labourer in any particular industry or concern. This will secure more recruits of whom there is already not much dearth. If wages, conditions of service and of home life are satisfactory, they are much more likely to continue in their new employment. Recruiting for Assam was at one time associated in many cases with abuses. Fraud and misrepresentation were frequently practised and kidnapping and abduction were by no means uncommon. Conditions of recruitment have much improved, but the comparatively small emigration to Assam from this province as compared with that to Calcutta, Bombay and other parts of India, seems to show that conditions there are not yet fully attractive. Certainly no improvement in the method of recruiting or even legislation can secure the labourer for, or keep him on work which he does not find profitable for himself.

(iii) *Desirability of establishing public employment agencies.*—They may be tried ; any agency that would add to the publicity of the better terms, if any, offered by the industries, will increase the number of recruits. But their success will depend ultimately on the terms offered by the industries ; if they are not better than what the labourer gets in his own village or nearer home, no agency can induce him to agree to them except by fraud or misrepresentation.

4. *Extent and effects of disturbance of family life.*—As already discussed under head "Contact with villages," about two-thirds of the emigrants go out without their families. In case of labourers, this is partly due to want of adequate accommodation for them at the places of their migration and partly to their old connections. Perhaps he has a house or some land or a petty investment or other property which ties him to his old home and requires a representative of his family in the village. When there is no such attachment there are the social and caste ties. He must marry his children within a highly limited circle, members whereof are either not available at his new place or they are not mutually known to each other, an ordinary acquaintance does not avail in such cases ; and he has to keep in touch with his old place. The result is that the farther off he goes out for the sake of employment, the larger is the amount that he has to spend in visiting his home and keeping his family there, and hence larger must be the difference between the wages in his village and those earned by him outside that can tempt him to stay there. The remedy lies in the supply of suitable and more extensive accommodation for them and a less centralized industrial system so that it may not be necessary to recruit large numbers from long distances.

6. *Recruitment for Assam.*—(iv) *Defects of the existing Act and system.*—The provisions of the Act dealing with labour contracts have been in abeyance in this province since 1908. In my own opinion those provisions were severe on the labourers and should be entirely repealed. I consider that no person under the age of 21 years should be allowed to be recruited for Assam unless when going there as a dependant of some person of full age. I am also of opinion that there should be a positive provision making the consent of the husband or lawful guardian, if any, of a woman compulsory before any woman is recruited. Cases of women without husbands or guardians who are willing to migrate of their own free will are few, and the fact that they have no husband or guardian can be ascertained from their village through the police or the village *panchayat*. There is no provision in the Act or the rules for the inspection of the emigration depots (i.e., accommodation provided for the intending emigrants) by the public. In my opinion there ought to be some provision for inspection by specified non-official visitors and such a depot should be open to inspection by every member of a local body in the district.

The present Act coupled with the rules in force in these provinces restricts recruitment to garden sardars only. For various reasons the employers have been anxious to be permitted to recruit through other agencies as well, i.e., through professional recruiters. If the above defects be removed a trial can be given to professional recruiters who should be residents of the district from which they are employed to recruit. They must work on behalf of a single employer or a body of employers registered as such. They should work under the same restrictions as the garden sardars and should be required to furnish a substantial security for the proper discharge of their duties with the magistrate of their district, which should be liable to forfeiture on evidence of misconduct, in addition to the ordinary liabilities of a garden sardar.

There is no provision for any inspection of the recruits in Assam, or of the conditions under which they work on the tea gardens, by any officer of the local Government from whose jurisdiction they are recruited. In my opinion some arrangement for such inspection is desirable.

It is necessary that the terms of employment on which a recruit agrees to go to Assam should be clearly understood by him, and in my opinion it would be better if these were reduced to writing in a standard form, and if it were provided that no

conditions apart from those in the standard form should be enforceable against the recruit. I think it would assist recruiting in the United Provinces if the industry was to make some definite conditions about leave at the time of recruitment; and also if the wages to be paid were clearly stated and compared favourably with those which could be earned locally by the recruit. Recruits obtained by misrepresentation are never likely to be contented; and in my opinion there is a good deal of misrepresentation at present by the garden sardars to ignorant recruits.

Mr. G. M. HARPER, I.C.S., COLLECTOR OF GORAKHPUR

The Gorakhpur district has a total area of 4,528 square miles, and is the largest district in the plains of Northern India. It is a district which has come under development more recently than the districts further west, and from the labour point of view it is of interest as it has only comparatively recently reached a stage when it can no longer reasonably support its population. In the census of 1901, the population was 2,957,074, in 1911, 3,201,180, in 1921, 3,266,830. This last census figure showed only a slight increase owing to the influenza epidemic which prevailed in 1918. Since then the annual returns of births and deaths show a normal increase of nearly 50,000. There has been a sequence of reasonably good harvests and there can be little doubt that the total population is now quite three and a half million, with an average density over the whole district of over 800 per square mile. This density is very considerably greater in the southern tahsils, where there are no reserved forests. In the Gorakhpur tahsil, for instance, the density was already 867 in 1921.

The arable cropped area rose by 51,622 acres in six years from 1921 to 1927, when it totalled 2,161,112 acres. In that year, the proportion of culturable waste land still available in the district for cultivation was lower than in any district in the provinces with one exception. Thus no further considerable extension of the cultivated area can be expected. On this figure of cultivated area the total annual yield of grain used as foodstuff is roughly estimated at 24,410,035 maunds, and if an average of one seer per diem per individual be allowed, the quantity is sufficient for the maintenance of 2,675,043 persons only. This shows that the available agricultural resources of the district are quite inadequate to maintain the population.

Another feature of the district is that apart from agriculture it has no industries that can serve as an outlet for the surplus labour. In the last few years a number of sugar mills have been opened, but these give employment to a total number of only 3,083 labourers, and this is for a period of less than six months in the year. These sugar mills, moreover, have had the effect of practically ruining the small *deshi* sugar refinery industry, which industry used to give employment to a considerable amount of labour throughout the district. It cannot be held accordingly that an extension of these sugar factories will improve matters as regards the demand for labour. The railway workshops employ 2,765 labourers, but there is no probability of any extension of this employment, and this is the only real industrial employment in the district. For the last three years an annual exhibition has been held with a view to exploring the industrial resources of the district as well as for the improvement of agricultural methods. From the latter point of view considerable success has been achieved, but as regards the former there is no sign of any progress at all. There is capital available in the district, but the means whereby it can be exploited and utilized for industrial development have not yet been discovered. Requirements in the way of industrial products by a district of this size are enormous, but no suggestion has been put forward by the residents of the district or by the Government department of industries as to how these can be produced within the district, and so give employment to the ample labour supply which exists.

On these facts it is obvious that the needs of large surplus population are being met by means of remittances by labour employed elsewhere. Figures as regards this, however, are not easy to secure. In the all-India census of 1911 the number of residents within Gorakhpur who gave their homes as elsewhere, was 152,000, while the number of people elsewhere, who gave their residence as in Gorakhpur district, was 136,000. In the census of 1921 the number of immigrants declined to 89,236, and the number of emigrants was 131,169. The number of emigrants was thus practically the same, but there was a very large decrease in the number of immigrants. The only official emigration agency is that for the Assam recruitment.

through the District Labour Association. The number of coolies so recruited has been as follows :—

1925-26	..	..	..	755
1926-27	..	..	..	627
1927-28	..	..	..	1,098
1928-29	..	..	..	1,161

These are obviously very small figures in view of what the total emigration must be. In Bangsaon, one of the six tahsils of the district, it is estimated that the approximate number of emigrants is between 4,500 and 5,000, and that for 100 persons of the whole population, one seeks his livelihood outside, the proportion of male and female emigrants being approximately five to one. The female emigration is to all intents confined to the Assam tea gardens, while male emigrants go further afield in large numbers to Calcutta and Rangoon, and a considerable number are known to find their way to Siam. An indentured labour association in the adjoining district of Basti sends an occasional agent to recruit labour for other areas, but no information as to its activities is available. The fact remains that in this particular tahsil of Bangsaon there is, as against a land revenue of nearly six lakhs of rupees, a payment from post offices on money orders of an equal amount, the great bulk of which consist of remittances from residents of the tahsil who have found employment elsewhere.

From all this it will be seen that the district has a very large available labour supply. The only control at present exercised over this consists in the restrictions imposed on the recruitment of labour for Assam. There is no very obvious local reason why this labour should be treated in a different way to the labour recruited for other areas. The Assam employer pays a substantial licence fee to secure certificates for his sardars without getting any corresponding advantage. There is reason to believe that during the last few years a considerable amount of labour has been recruited for Assam by agents working privately on behalf of forest contractors, but no case of abuse by these unlicensed recruiters has come to notice. The only other attempt in the district to organize labour has been by the Railwaymen's Association, which is a registered trade union. This body has exercised but little influence, and is now admittedly to all intents, dead. Its activities, such as they were, were due entirely to the influence of one individual who is no longer in the district.

The general conclusion is that though the district commands a very large labour supply, yet its experience affords no guide as to how the same could be regulated and controlled in the future.

#### THE SUPERINTENDENT, HARNESS AND SADDLERY FACTORY, CAWNPORE.

The factory comprises a tannery, curriery, saddlers' and tailors' shops, metal fitting and machine shops, smithy (complete with power hammers and drop stamp batteries), carpenters' shop, brass foundry, stores and inspection departments, etc. Appropriate modern machinery is installed in the various departments for accurate and economical production of leather and metal components. The factory is electrically driven, having its own power station of 600 k.w. capacity. Water for manufacturing purposes is obtained from the Ganges canal close by.

• The value of our out-turn in the year 1927-28 was Rs. 41,00,000. Normal peace-time labour strength is 2,000 men, but during the closing years of the Great War about 4,500 men were employed.

#### I.—Recruitment.

1. (i) and (ii) No information is available as to the origin, extent and causes of migration of labour now engaged in the leather industry in Cawnpore district. The Government Harness and Saddlery Factory was established in 1862, at which date Cawnpore has been described as "a considerable centre for native tanners and leather dressers." Within recent years the migration can be described as purely local, as a considerable leather "labour market" exists in this part of the United Provinces.

2. (i) Our labour comprises low caste Hindus (*chamars*), employed in the tannery, curriery and saddlery departments, and mixed castes of Hindus and Muhammadans, employed in the metal fitting, smithy, carpentry and tailoring sections. Most of our men, probably 75 per cent., live in and about the city of Cawnpore, the remainder

live in villages on the other side of the River Ganges. Comparatively few men hail from villages considerably distant; these men take advantage of the longer holidays to visit their homes, and are granted leave on request to enable them to attend ceremonies or assist in the work of harvesting, etc., at their villages.

(ii) Our peace-time labour force can be considered as permanent. Employment has been steady and continuous in this factory for about 30 years. We employ normally approximately 2,000 men.

3. (i) Recruitment as generally understood is unnecessary, the local labour market meets easily all our demands, which latter are arranged through the medium of our labour bureau.

(ii) Only detailed improvements appear possible to us; our present methods suffice.

(iii) *Public Employment Agencies.* (a) In our experience the desirability of establishing such agencies in this district is doubtful, nor do we think the necessity arises. In this factory, where the "gang piece-work system" is chiefly employed, the gangers prefer to select and recommend their own men from the local market, of whom they have intimate knowledge.

(b) At the present stage of industrial organization we do not think there is much prospect of such an institution justifying its existence. So far as we are concerned such schemes need not be considered until our present methods prove unsatisfactory.

4. *Extent and Effects of Disturbance of Family Life.*—As affecting our labour the extent is not serious, due to the small proportion of men concerned. Generally, the effects at this date, considering the present and continually increasing development of communications, cannot be serious. It must, of course, be realized that such men have the added expense of maintaining a home near to their work and of periodic visits to their villages for attendance at ceremonies, harvesting seasons, etc.

7. *Unemployment.*—(i) Employment in this factory has been steady and continuous for many years, but this year our labour is down some 20 per cent. So far as can be seen, this reduction will be of a permanent character. A programme of army reorganization now embarked upon will result in smaller demands for our manufactures. Further, an increased proportion of army orders, normally placed with us, is being diverted to private firms.

(ii) *Extent to which caused by*—(a) *Retrenchment or dismissals.*—Our unemployment falls largely under this head for reasons given immediately above.

(b) *Voluntary retirement.*—In our case negligible.

(c) *Other causes.*—In our case negligible.

(iii) No scheme for *alleviating*, let alone *remedying*, distress caused by unemployment appears possible, except one involving an increased burden for Government, or for the employer, and/or contributions from workers in employment already impoverished. As situated to-day none of the parties mentioned can be expected to meet further calls and until such time as trade and industry become normal, the prevailing distress can only be partially alleviated by family and other private charity.

(iv) *Unemployment insurance.*—This appears to be the only equitable and permanently satisfactory scheme for dealing with unemployment, but for the reasons given immediately above, the time does not seem opportune for its introduction. A scheme, such as the one which has worked so successfully in England, where the worker, the employer, and State all contribute, seems to be indicated. It is admitted that many factors peculiar to this country would make the administration of the scheme much more difficult here.

(v) *Application for international conventions relating to employment.*—We have no comments under this heading, except that great caution should be observed in applying western standards to a country offering so widely different racial and religious customs. Other factors in this connection of equal importance are those of education, temperament and climate.

8. *Labour "Turnover"*—(i) *Average duration of employment.*—In our case, excluding services less than six months, this is as follows:—(a) Skilled and semi-skilled men, 9 years; (b) Unskilled men, 2.5 years.

An analysis of our "labour turnover" for the past three years gives an average annual figure of:—Skilled and semi-skilled, 40 per cent.; Unskilled, 100 per cent.

These figures do not do justice to our workers, many of whom have served for periods varying from 10 to 50 years. Many die in our service, as did their fathers before them. It is the "floating" proportion of the labour, changing twice or more in the year which makes the figures so unsatisfactory.

(ii) *Extent of casual employment.*—This is small, due to fairly even demands received yearly from the army.

(iii) *Absenteeism*.—(a) Extent of absenteeism from all causes exclusive of gazetted holidays during the year 1928-29 is as set out below :—

	Possible attendance.	Time lost.	Time lost.
	Days.	Days.	Per cent.
Skilled and semi-skilled ..	463,608	54,482	11.8
Unskilled .. .. .	96,996	8,937	9.2

Absenteeism in character takes the form of men deliberately staying away from work for one or more days often, apparently, for no valid reasons. A man in the first instance may or may not have requested leave. Causes fall under the headings of sickness, attendance to private affairs, performance of ceremonies, visits home, desire for a holiday, etc. There is, of course, a type of man who only desires sufficient money to provide himself with the bare necessities of life and when he has ensured this in any month he regards further work as wasted effort. Our attitude to absenteeism is naturally tempered according to the degree of activity in our shops. When we are working at full pressure, chronic absenteeism is checked by discharging the worst offenders, but during slack periods this evil does not assume such importance. Normally, men absent for more than 10 days without a sufficiently good reason are discharged.

(b) *Seasonal or otherwise*.—Seasonal absenteeism in a country fundamentally agricultural must be expected. However, this factory has not many men who come from very distant villages desiring to work on their lands periodically. Further causes of absenteeism are dealt with in (a) above.

(c) *Time and wages lost*.—Below is given a statement of time and wages lost during the year 1928-29 :—

	Time lost.	Time lost.	Wages lost, approximate.
	Days.	Per cent.	Rs.
Skilled and semi-skilled ..	54,482	11.8	54,482
Unskilled .. .. .	8,937	9.2	5,027

9. *Apprentices Act, 1850*.—This Act has not been of any great value to us, though the provisions of Clause 15 of the Act form part of the agreement entered into with our apprentices to tanning and currying, who are "minors".

## II.—Staff Organization.

12. (i) Recruitment for superior staff of foremen and assistant foremen is by advertisement and selection is made both in England and India.

The subordinate supervising staff, i.e., chargemen and supervisors, are normally technically trained Indians, selected by the Director of Ordnance Factories and Manufacture or by the superintendent of the factory. Where possible, a man is promoted from the ranks, though at present it is a very exceptional worker who can qualify for such advancement. Indian chargemen fitted by personality, education, and experience may be promoted to the posts of assistant foremen; in fact, we now have three such assistant foremen in this factory, two of whom received their technical training at the Lucknow Technical College.

(ii) The vast majority of the workmen being illiterate, it is not possible to train and promote any of their members except to the most junior supervising posts. Our only hope lies with the next generation, and we have a selected number of boys, 'sons of workmen attending the factory school, undergoing training as "boy artisans." This scheme of training, dealt with elsewhere in this report, provides for elementary education, partly general and vocational in character, and three years' intensive practical training in one of the factory departments. The scheme has not been in operation long and we have as yet no results to record, but it is hoped that these boy artisans, at present 16 in number, will provide some workers qualified for advancement to supervising posts. Concurrently, other sons of workmen, approximately 60 in number, are attending the factory school (dealt with elsewhere) most of whom will no doubt profit by the educational facilities provided and become more efficient and intelligent workers, even if they do not provide material for selection to supervising posts.

The above schemes are in their infancy; should we achieve a sufficient measure of success, more ambitious schemes are contemplated.

13. (i) Relations generally are excellent and the factory has run smoothly for many years. A lot, of course, depends upon the personality and character of the foremen in charge of the departments, which determine the degree of confidence and loyalty of the men.



(ii) From the inauguration of the factory and until 10 years ago, the system of employing "jobbers" or "contractors" was in vogue. The evils inseparable from this system had reached such a magnitude that it was superseded by gang and individual piecework. The present condition of the workers, provides a vast contrast to that obtaining under the contractor system. They are more contented, receive a fair wage and we have more and better work from them in return.

(iii) Works committees were tried some years ago with negative results. Points at issue are first referred to the head of the section for settlement, where in the majority of cases they are disposed of to the satisfaction of the men. However, in the absence of settlement at this stage, the workmen have direct access to the superintendent of the factory, where their grievances always meet with detached and impartial judgment. The men seem to prefer these methods of ventilating their complaints.

14. (i) Our system of registering and checking attendance of labour is briefly as follows :—Each man has a metal disc or "ticket" with his number stamped thereon, and he places it on a ticket board, situated near the gate office, on leaving the factory at night. On entering the following morning the man removes his own ticket from the board and places it on a similar board situated close to the department in which he works. The gate office clerk, after closing the factory gate at 7 a.m., enters up the attendance register or "acquittance roll" ascertaining by those tickets which are not removed from the gate office board the men who are absent that day. The individual section ticket boards are locked soon after the sounding of 7 a.m. whistle and the keys handed over to a representative of the local deputy assistant controller of army factory accounts. Subsequently, these boards are opened by a representative of the accounts branch and from the tickets which are missing from these boards the accounts department check the absentees and compare with the particulars already furnished by our gate office. Any discrepancy is investigated immediately. Surprise checks are also carried out by the accounts branch.

Timekeeping, by which is understood the recording of time worked by day workers (i.e., not on piece-work) is the duty of the section clerk, the records being approved by the head of the section.

With regard to piece-work, on receipt of instructions in the shops to proceed with manufacture of a store, a piece-work card is made out by the section clerk, giving particulars of the work, and stating the piece-work price which is a standard one approved by the management. This card is given to a piece-worker, or to the ganger in the case of a piece-work gang; on completion of the work, the card is certified by the head of the section as completed and forwarded to the deputy assistant controller of army factory accounts.

After checking the piece-work cards and day-work cards, the "pay roll" is compiled by the accounts department. This document is forwarded to the factory during the first week of the month, and wages are paid in accordance therewith.

(ii) The system of paying wages is briefly as follows :—The factory cashier prepares "pay slips" in duplicate on which are entered the ticket number of, and the amount of money to be paid to, each individual worker. One set of these slips is forwarded to the sections for distribution to the right individuals and the other set of slips is inserted in the wage tins in which the cashier has placed the wages due. Payment is made by the cashier, or his assistant, in the presence of the head of the section concerned who initials each entry as a man, producing the duplicate pay slip, presents himself for payment. A gazetted officer of the factory is also present when wages are being paid.

Deductions for fines, if any, are effected by the cashier and the net amount of the wage placed in the tin (wage container).

15. The "contractor system" was abolished in this factory some 10 years ago.

### III.—Housing.

16. (i) and (ii) No housing is provided for the workmen by us, but a "workmen's lines scheme" for housing about one-third of our men has been sanctioned by Government and funds allotted for execution of a portion of this scheme during the current financial year. Unfortunately, difficulties experienced in securing the site selected in the Cantonment area have so far prevented commencement of the work.

(iii) and (iv) The vast majority of our workers living in the city hire houses from private landlords. Those living in the villages outside mostly live in houses owned by their families.

17. We have powers to acquire land in the Cantonment area after paying any compensation due to owners of property concerned by such resumption. Difficulty is being experienced in securing a suitable site near the factory, but negotiations are now proceeding for one.

18. (i) and (ii) The accommodation which will be afforded by the houses we shall build for our men will be much superior to anything which they are accustomed to or would demand. Their ideas of housing and hygiene are very primitive. Particulars of the various types of houses to be built are as follows :—

Type of Quarters.	Number to be Built.	Prospective occupants.	Accommodation, each quarter.
" O "	5	Indian service mechanics on average salary of Rs. 180 per month.	1 room, 16 ft. by 14 ft. ; 1 drawing room, 20 ft. by 14 ft., for every six men ; 1 cook house, 16 ft. by 10 ft., for every six men ; 8-ft. verandah, front and back ; 1 bath room per man ; 1 servant's quarter per man.
" P "	12	Superior artisans and clerks on average salary of Rs. 120 per month.	2 rooms, each 12 ft. by 14 ft. ; 6 ft. verandah in front ; 1 kitchen, 10 ft. by 11 ft. ; covered way, 6 ft. by 10 ft. ; 1 bath room, 8 ft. by 7 ft. ; 1 latrine, 6 ft. by 6 ft. and compound wall.
" Q "	40	Superior artisans and clerks on average salary of Rs. 80 per month.	2 rooms, each 10 ft. by 12 ft. ; 6 ft. verandah in front ; 1 kitchen, 6 ft. by 6 ft. ; covered way, 6 ft. by 8 ft. 1 bath room, 4 ft. by 5 ft. ; 1 latrine, 4 ft. by 4 ft., and compound wall.
" R "	100	Artisans and inferior clerks on average salary of Rs. 50 per month.	1 room, 12 ft. by 10 ft. ; 6 ft. verandah in front ; 8 ft. verandah at back ; 1 kitchen, 8 ft. by 6 ft. ; 1 bath room, 5 ft. by 4 ft. ; 1 latrine, 4 ft. by 4 ft., and compound wall.
" S "	340	Artisans of inferior class, single men on average pay of Rs. 30 per month.	1 room, 12 ft. by 10 ft. ; 6 ft. verandah in front ; 8 ft. covered verandah at back, with a kitchen 8 ft. by 6 ft. N.B.—This accommodation is for two single men.

It might be added that we are also building six " M " type quarters for our Indian chargemen, on salary of Rs. 200 to Rs. 300, and five " N " type quarters for senior supervisors, gatekeepers, Indian chemists, etc., on average salary of Rs. 180 per month.

(iii) Provision of electric lighting for individual houses of the larger type is to be made and general street lighting in the case of the blocks of the smaller houses. Conservancy provision is included in the scheme and adequate water supply will be available from a " tube well " to be sunk on the site.

20. The proposed rents for the various quarters, approved by Government, are as follows :—

Type of Quarter.	Average pay of Occupant.	Monthly Rate.
	Rs. a.	Rs. a.
" Q " .. .. .	180 0	11 4
" P " .. .. .	120 0	5 10
" Q " .. .. .	80 0	2 8
" R " .. .. .	50 0	1 9
" S " .. .. .	30 0	1 0

22. We believe that the moral effects of the present housing on our workers is detrimental to their health and efficiency. We look forward to an all-round improvement when our "lines scheme" is completed.

#### V.—Welfare (other than Health and Housing, but including Education).

32. (i) The extent of our welfare work in the factory at present is confined to education of a number of workmen's children in the factory school. The school is for boys from the age of nine upwards, the subjects being taught being reading and writing (Urdu and Hindi), arithmetic, freehand drawing, and colloquial English, generally up to the standard laid down in the U.P. prospectus for lower primary schools. The extension of this work is prevented by lack of accommodation. A new school has been sanctioned by the Government of India, but the Government of the United Provinces, who are to meet part of the cost of the scheme, have not yet decided their policy in relation thereto, and the project is, therefore, held in abeyance. About 60 boys are in attendance. A tuition fee of 8 annas per month is paid by each boy.

(ii) A co-operative society, run by the workpeople, has been in existence for seven years. Its chief function is to supply loans and, to a smaller extent, provide cloth for members. This organization is dealt with under paragraph 38.

36. *Provision of Educational Facilities by Employers*—(ii) *For half-time workers*.—Our artisan boys would come under this heading as they attend the factory school for two hours per day and work six hours in the shops. These boys, as previously mentioned, are sons of workmen attending the school, specially selected for the promise they hold out of becoming fit for junior supervising posts after special training.

(iii) As stated under paragraph 32, sons of the workmen from the age of nine upwards are eligible to attend the factory school. Particulars of the education provided have already been given.

(iv) The facilities we provide are used to the fullest extent, and when our new school is built we look forward to an extension of the work.

37. *Desirability and Possibility of Provision for Old Age and Premature Retirement*.—No doubt such provision is desirable but the possibility of its being made within the next few years is rather remote. As previously stated under I (7) (iii), the scheme would have to be one involving contributions from the State, the employer and the worker himself, but in view of the burdens already borne by the first two parties and the poverty and indebtedness of the worker, it does not seem possible that any scheme can be evolved for some time yet. In the case of this factory, old workers, on giving up work owing to infirmity, receive a small gratuity from the fine fund. Unfortunately, of late years, due to the smallness of this fund, gratuities are much smaller than we should like to see. Similarly, the nearest relative of a deceased old hand receives some gratuity.

38. *Co-operation*.—This is understood to refer to the activities of a co-operative society, such as the one mentioned under paragraph 32. The Harness and Saddlery Factory Co-operative Society, Ltd., was inaugurated in 1922. The following year there were 292 members. This year there are 723 members, of whom about 525 are workmen. The share capital held by these members this year is approximately Rs. 30,000. The capital is subscribed in Rs. 10 shares payable at the rate of Re. 1 per month per share. The society has built up out of profits during its seven years' life a reserve fund of some Rs. 4,500.

The main object of the co-operative society is to free its members from debts contracted with moneylenders, to whom generally extortionate interest charges are payable. Apart from this, money is usually borrowed to enable a member to discharge his responsibilities in connection with marriage, religious, and other ceremonies, or for cultivation of his land, house repairs, etc. Any member may have credit up to three times the nominal value of the shares held by him, subject to a maximum of Rs. 500, repayable in 15 monthly instalments. The rate of interest charged is 2 pies per rupee per month, which is equivalent to 12½ per cent. per annum. During the past seven years the society has advanced by way of loans the sum of Rs. 1,78,380, approximately one-third of which was disbursed last year.

A cloth store is attached to the co-operative society, but this is as yet only working on a moderate scale. During the past four years, sales of cloth amounted to approximately Rs. 52,000.

**IX.—Hours.****A.—Factories.**

55. (i) 44½ hours per week, 7½ hours per day on 5 days, 6 hours on Saturday.  
 (ii) Overtime is not worked in the factory except occasionally in the maintenance department.

(iii) Our labour is not on call during non-working hours.

56. *Days worked per Week.*—Five and a half.

57. (i) and (ii) Our working hours are under 60, but in connection with this aspect of labour we find that if the working day is extended much beyond the normal length there is a considerable fall in efficiency, and we by no means secure the full advantage of any additional time worked.

60. (iv) Exclusive of Sundays and the half-day holiday on Saturdays, the workmen have 40 days per annum.

**XII.—Wages.**

96. (i) Rates of pay in this factory vary from 8 annas to Rs. 3 per day, depending upon the class of labour, and in the case of skilled men upon the degree of skill they possess. The majority of our men, skilled and semi-skilled, work on a piece-work basis, either individually or in a gang. An analysis of our labour for 1928–29 gives :—Number of skilled and semi-skilled men, 1,692 ; number of unskilled men, 354.

The average unskilled workers' wage may be taken at 9 annas per day and that of the skilled and semi-skilled as Re. 1 per day. Earnings vary normally from about Rs. 12 per month to Rs. 70 per month, depending upon the class of labour and the percentage of piece-work earned. During the year 1928–29 the average monthly wage paid in this factory for skilled, semi-skilled, and unskilled labour for an average month of 23 working days was Rs. 21. In amplification of this last-named figure the following table is of interest.

Average monthly wage paid by H. and S. Factory in respect of all labour (skilled, semi-skilled, and unskilled) :—

Year.	Amount.	
	Rs.	a.
1920–21 .. .. .	18	3
1921–22 .. .. .	20	0
1922–23 .. .. .	20	2
1923–24 .. .. .	18	7
1924–25 .. .. .	19	6
1925–26 .. .. .	19	14
1926–27 .. .. .	18	12
1927–28 .. .. .	19	9
1928–29 .. .. .	21	0

It will be seen that the average wage over the past nine years is Rs. 19-8 annas.

(iii) *Difference between money wages and money value of all earnings.*—Not understood unless it is intended to refer to difference between actual time rates and piece-work earnings, in which case we advise the average piece-work earned in this factory at 30 per cent. overtime rates.

97. (i) It will be seen from the foregoing that the wages have been fairly stationary over the past few years.

(iii) No definite figures are available, but from conversation with some of our men it appears that to-day's cost of living is about 3 times that of pre-war ; in the interval, wages have been approximately doubled only.

101. Wages are fixed by mutual agreement at the time the man applies for employment. Generally speaking, we would say that daily paid men are rated according to the prevailing average for the district. Piece-workers are rated according to their skill, which determines their capacity for earning piece-work money on prices based on average skill.

102. Overtime rates of pay, laid down in Army Regulations, India, are :—Ordinary "time rates" for day shifts ; "time and a half rates" for night shifts ; work performed on Sundays is also paid at the above rates.

106. (i) Extent of fining is very small here ; in fact, is only Rs. 15 per month average for the year 1928-29, and then only for bad work. Average monthly wage payment last year was Rs. 30,000.

(iii) Fines are utilized for payment of gratuities to old and infirm workers and to dependants of old workers who die in the service.

(iv) So far as we are concerned, legislation is not justifiable.

107. (i) Wages are paid per month.

(ii) Wages are paid between 1st and 10th day of the month, for work done the previous month.

(iii) (a) An attempt was made here to pay the men twice monthly but they prefer to wait the full month. No knowledge of desirability for legislation.

(b) The period during which payment is to be made in this factory is limited under standing instructions of the Director of Ordnance Factories and Manufacture, Simla. We have no knowledge of the desirability for legislation.

(iv) Wages unclaimed are held by us for three years awaiting claimants. After this the money lapses to Government.

108. Unfortunately, indebtedness is the prevailing weakness of the workmen, the vast majority of whom are in debt and they appear to be in this state for most of their lives ; the chief function of our co-operative society is to assist workmen in this connection. This society has been fully dealt with elsewhere.

110. (ii) No reasonable leave requests are refused, but naturally the state of work in our shops determines the degree of encouragement given by us.

(iii) No loss is incurred ; if a man is on leave at the time when wages are paid, he is paid on " absentee pay day " on the 20th of the month. Failing this he receives the wages due on the following pay day.

### **XIII.—Industrial Efficiency of Workers.**

112. A decided increase in efficiency in the case of our skilled men has been noticeable in recent years. This applies to all our departments and trades. A gradual but continuous improvement has taken place since the factory was changed over from the contractor system to piece-work. Higher standards called for by the army necessitated more rigid inspection and the workers have responded. Better supervision obtaining under our present organization has also had a marked influence in facilitating increased and better out-turn.

113. A few of our best men, particularly in the case of saddlers, compare very favourably with foreign workers, but the vast majority do not.

114. *Extent to which Comparisons are affected by—...* (v) *Physique*, (vi) *Health*, (vii) *Education*, (viii) *Standards of Living* and (ix) *Climate*.—These are the deciding factors influencing a comparison with foreign workers. Physique and health, affected by their dietary, standards of living, housing, etc., do not permit of their putting forth sustained manual effort and the result is most noticeable on heavy work. Education is one of the most important items and lack of it does not enable them to tackle new work without a pattern to guide them and the closest supervision. On the other hand, once they have got into the swing of repetition work (in the smithy or in the machine shop) their production and quality of work is quite good. The climate of India being what it is, has a considerable retarding influence wherever manual work is to be performed.

116. Allowing for efficient machinery, the workman can only improve by educating himself to a higher sense of his own responsibilities and to a pride in his work.

### **XIV.—Trade Combinations.**

120. (i) A "labour union" was started here in 1927 but only 20 per cent. of our labour is now connected with it. The subscriptions are so small that it is very doubtful if any benefit schemes could be attempted.

(ii) Most of the workers are indifferent and extent of control by them is very little, if any.

(iii) Our attitude to any reasonable requests advanced is sympathetic.

### **XV.—Industrial Disputes.**

123. No strike or lock-out has occurred in this factory during the last 10 years.

## UPPER INDIA CHAMBER OF COMMERCE, CAWNPORE.

## Introduction.

The Chamber was founded in January, 1889, and is believed to be the first Chamber of Commerce established in the interior of India. It concerns itself more particularly with the industrial and commercial interests of the United Provinces, within which area the large majority of its members have their activities. It has however, a few members operating in Behar, the Punjab, Marwar and Bhopal.

It may be said that the Chamber represents practically the whole of the major industrial interests in its area and its membership includes the majority of the Banks doing business in the area, the whole of the Railways serving the area and a very large proportion of the European and a lesser proportion of the Indian commercial interests in the area.

The industrial activities represented by the Chamber comprise cotton spinning and weaving (8), cotton spinning (2), cotton ginning and pressing (4), woollen mills (1), cloth dyeing and printing (1), (the majority of the weaving mills do their own dyeing) sugar milling and refining (6), brewing and distilling (3), electric generation and supply (1), electrical engineering (3), mechanical and civil engineering (2), brick making (2), brush making (1), chemicals (2), turpentine and rosin (1), tobacco (1), carpet making (1), dairying (1), printing and publishing (1), flour milling (1), lock works (1), paper mills (1).

The majority of these industries are carried on in Cawnpore and the information furnished in this statement relates more particularly to these industries.

The present membership of the Chamber is 71 but it must be noted that several members are interested in more than one industry. Of the 71 members 18 might be described as representing purely Indian interests in that they are individual Indians or firms under exclusively Indian proprietorship or management. Of these 18 ten are industrialists.

In close connection with the Chamber, through its membership, is the Indian Sugar Producers' Association which represents 90 per cent. of the white sugar manufacturers of India and whose office is conducted by the Chamber.

The Chamber is represented on the United Provinces Legislative Council by two members, one Indian and one European. A member of the Committee of the Chamber, himself an ex-President of the Chamber, represents the European Constituency of the United Provinces in the Legislative Assembly. The Chamber also returns 3 members to the Municipal Board of Cawnpore, and is represented on the Advisory Committees of most of the Railways serving the Province and on the various Government Boards and Committees acting in an advisory capacity to the local Government. The Chamber therefore claims to speak as a thoroughly representative body.

## I.—Recruitment.

1. In Cawnpore the labour employed in the various factories may be said to come to an extent of from 90 to 100 per cent. from the United Provinces. Of this figure from 30 to 50 per cent. is either local or comes from within a 12 mile radius.

In regard to the communal constitution of the labour force conditions vary according to the type of the industry and, in some cases, to the location of the factory.

In the textile industry the proportion of Hindus to Mahomedans may be said to be as 3 to 1. There is a sprinkling of Indian Christians.

In the leather industry the communal proportion is 2 to 1 in favour of Hindus, the bulk of the Hindus belonging to the depressed classes.

These proportions may be said to have been pretty well constant for several years.

2. Allowing for the interchange of labour between the several textile factories it may be said that the textile labour force is permanent.

In the leather and wool industries there is less interchange and the force is permanent. The same may be said of the sugar and oil industries.

Of late years there is far less contact with villages than formerly. Labour is more habituated to urban conditions and there is, perhaps, less necessity for an individual's presence in his village.

3. Recruitment is largely through mistries; the comparatively higher remuneration obtainable in the mills and factories, however, furnishes the first attraction to the labour force of Cawnpore.

This system of recruitment through mistries may have its objections. But it is exceedingly doubtful if employment agencies would be free from similar objections, while they might even introduce other evils. In any event interest of an employment agency worker would cease with his recruitment, whereas it is within the competence and to the interest of the mistry to instruct the workmen he has recruited and so improve his earning-power.

4. There cannot fail to be a certain measure of disturbance in family life ; but the extent of this is probably no greater than in western countries, and perhaps not so great, since it is understood that from 80 to 90 per cent. of the workers have their families with them.

7. The Chamber is not aware of the existence or of the extent of unemployment in Cawnpore.

The mills and factories find little difficulty in obtaining their full requirements of labour, even at times of extra pressure. Extra staffs readily revert to other methods of employment when such pressure ceases. This would go to show that there is not much real unemployment.

The conditions are not such as to require the assistance of unemployment insurance or of international conventions relating to unemployment. It is doubtful whether such measures could indeed be applied.

8. Conditions vary greatly as between different factories. There is a greater turnover in the case of cotton mills.

Instancing one such mill the number employed for over 10 years is 20 per cent. of the total labour force.

In other industries the percentage employed for from 7 to 10 years is from 40 to 50 per cent.

The proportion of those employed for less than two years varies from 7 to 50 per cent. in different industries.

If unskilled labour were omitted from the figures given above the length of service would be higher.

In regard to absenteeism it has been found extremely difficult to arrive at any precise figure but it is stated that absenteeism prevails to the approximate extent of 10 per cent. with a 10 per cent. loss of wages.

## II.—Staff Organization.

10. The Directional organization, whether consisting of Directors or Managing Agents, control the buying and selling policy and arrange for finance.

The control of the mill or factory is exercised by the directional staff through a general manager, or, in some cases, through departmental managers or superintendents, with assistants under them.

11. The directors or managing agents select the managers and/or departmental managers or superintendents.

12. (i) The selection of the senior supervising staff is also retained in the hands of the directors or managing agents. Where suitable candidates with the requisite technical qualifications are not available in the country the superior technical staff is recruited from abroad.

The subordinate supervising staff is mainly recruited from men trained in this country, whether in the mill itself or in Government Technical Institutions.

(ii) Facilities for practical training are in the mill or factory. Theoretical and a measure of practical training are obtained in Government Technical Schools. The mills encourage their workmen to join the artizan classes in these schools and the prospects of promotion of such men are obviously increased.

13. (i) Relations generally are good. There is free accessibility to the higher management for even the lowest paid worker.

(ii) In Cawnpore the term "jobber" is not used in the exclusive meaning of a person recruiting labour. Line mistries are sometimes described as jobbers but the engagement of labour is only part of their duty.

The employment of mistries for the recruitment of labour has been dealt with under Head 3.

(iii) The experiment of setting up Works Committees has been tried.

It was found to be a failure as regards its essential purpose, and where it now continues it has resolved itself into the formation of committees of mistries.

14. (i) All registers pertaining to attendance and wages are kept by special clerks under the supervision of departmental managers. In all cases they are further checked in the main office, where the amounts payable are made up.

(ii) Wages are, in almost all cases, paid directly by or under the personal supervision of the departmental managers.

15. (i) In the textile mills the only places where contractors function are in durrie and tent-making, building work, loading and unloading. In some mills no contractors are employed.

In leather works the employment of contractors is mainly confined to building works and loading and unloading.

In sugar works building work is generally done by contract. Sugar storing in godowns is also generally done by contract.

(ii) The Chamber has no information as to the extent of sub-contracting.

(iii) In the case of *intra-mural* work the same control is exercised over the contract labour as over the ordinary factory labour.

### III.—Housing.

16. (i) Out of 32,274 factory workers in Cawnpore, mills employing 14,710 provide 3,117 quarters for them. (2,603 single, 453 double and 61 large quarters.)

(ii) Government is understood to have provided no housing for factory workers.

(iii) and (iv). Figures are not available to show the extent to which housing for the labour force is provided either by landlords or by the workers themselves. It is, however, understood that a large number of workers have built their own houses.

In meeting the points under this head the Committee of the Chamber consider that it is necessary to state the attitude of employers towards the housing problem.

The attitude of employers towards the question of the housing of their industrial labour may be stated to be universally sympathetic, and, where this has been possible, individually helpful.

This attitude is based on the realization of five fundamental facts. (a) The city is densely overcrowded and, in many quarters, including principally those occupied by workers, has been, and in fact still is, insanitary. (b) On the health of the workers rests their usefulness to their employers. (c) The workers themselves are unable to provide themselves with sanitary dwellings. (d) No outside agency, whether governmental, municipal or private, has hitherto existed which was prepared to undertake the solution of the problem. (e) Experience has shown that in spite of powers possessed, the municipal authority has not been able to ensure either that degree of sanitation or the observance of regulations which is essential in the administration of workmen's settlements.

The employers, or such of them as have found it practicable, have therefore been compelled themselves to enter on large and, directly, unremunerative schemes for the provision of workmen's settlements.

In Cawnpore this undertaking was first entered on nearly forty years ago when the Cawnpore Sugar Works provided a workmen's settlement at Juh, and laid down a light tramway to convey their workers to and from their refinery. This settlement no longer exists, as the need for it disappeared when the city spread more towards the south. Some of the workers were housed closer to the refinery. About thirty years ago the Cawnpore Woollen Mills Company began the construction of a large settlement in close proximity to their mills, and Messrs. Cooper, Allen & Co., almost immediately thereafter, also built a large settlement on the nearest suitable site. Both these settlements are now vested in the British India Corporation, and are being extended. The Elgin Mills Company have a smaller settlement on a site available near the mills, but the area is restricted.

Other mills and factories were prevented from entering on similar schemes mainly by the impossibility of obtaining suitable land for their settlements at anything approaching an economic or even a reasonably uneconomic rate. Land was offered by the Cawnpore Improvement Trust at exorbitant rates, and with no undertaking for the provision of water or sanitation, while the municipality was unable to assist with these necessary requirements.

The Chamber, on behalf of employers, has for many years urged on the authorities the necessity for facilitating the acquirement of land for industrial dwellings. Representations on the subject were made to the Indian Industrial Commission in 1916 and again in 1918, and the Chamber's views were fully stated to the Local Government in 1921 in reply to a reference from the Government of India on the subject of the proper housing of the industrial classes.

In all these representations, while admitting the readiness of employers to do their fair share in the matter of housing industrial labour, the Chamber has maintained the position that this is, in normal circumstances, essentially the duty of Government or of the corporate authority, and that it is not for the employer alone to discharge this function.

This policy has been accepted by the Government of India which, in a letter dated the 18th October, 1920, enunciating its policy on the subject, stated "the onus of actually providing dwellings for his industrial labour cannot be laid upon the individual employer."



To-day it is believed that the employer, where he has not already provided his labour force with dwelling accommodation, would be prepared to co-operate in any corporate or joint scheme for the purpose.

The employer requires facilities for the acquirement of land, and for the free provision of water, lighting and sanitation and he also requires financial assistance, for he agrees with the dictum of the Government of India, stated in the letter above referred to, that "the crux of the whole position is the financial problem."

18. (i) Speaking broadly the accommodation provided is in three classes, single quarters, double quarters and larger quarters.

The tenement system of Bombay does not obtain here. Most of the quarters are single storeyed and none is more than two storeyed.

(ii) In general it may be said that the types of quarters provided have been designed to meet the demand of the workers themselves, with due regard to hygienic requirements. The ideal type of quarter has not yet been evolved.

(iii) Water, sewage and lighting mains are brought to the settlements by the municipality. Thereafter the distribution rests with the employers, and has been adequately met.

19. The accommodation provided is fully utilized.

20. Single room quarters from Rs. 1-2 annas to Rs. 2-8 annas; double room quarters from Rs. 3-4 to Rs. 12; larger quarters from Rs. 4 to Rs. 17.

21. Subletting is not permitted, and is believed to be non-existent. The relatives of employees who are tenants are, in some cases, permitted to reside in mill settlements even though in other employ. The numbers of such are limited, and they are subject to notice to quit.

A worker's claim to his quarters terminates when he leaves the service of his employer, but this rule is not strictly enforced. Eviction, in the accepted sense, is only enforced when a resident is guilty of a serious offence.

22. Housing in industrial settlements is understood to have had a beneficial moral effect on residents.

#### IV.—Health.

23. (i) Statistics are not available as to the general health conditions of the factory workers, as distinct from the rest of the population of the city.

In the case of one industrial settlement, however, it has been shown that the death rate in the settlement, averaged over a period of 24 years, was, roughly, 20 per mille less than the general death rate of the city, the mortality figures being respectively 31.99 per cent. in the settlement as against 53.44 per cent. in the city.

(iii) The working conditions in the factories are generally satisfactory, and meet the requirements of the Factories Act and Rules.

(vii) The figures given in subhead (i) above indicate clearly that improved housing has definitely lowered the death rate.

24. (i) Most employers have first aid facilities in the factories. Several have established up-to-date dispensaries under qualified medical attendants where free medicine is supplied.

In the industrial settlement free medical attendance and free medicine is supplied to the worker and his dependents. Employers also subscribe to the support of the Prince of Wales Hospital and, in some cases, to the Dufferin Hospital.

25. (i) As far as workers are concerned the medical facilities provided are fully utilized.

The facilities provided by employers appear to be fully appreciated.

(ii) In the case of one group of employers the utilization by women of the facilities afforded in the industrial settlement amounts to over 70 per cent. of the total cases treated.

26. (a) In the case of factories the provision of sanitary arrangements is fully up to and even in excess of the requirements of the Factories Act.

(b) The sanitary arrangements of the city may leave much to be desired, but there is an ample, and generally adequate, water supply, which is being improved. The consumption per head of filtered water within the municipality in 1928-29 was 36.5 gallons as against 31.2 gallons in the previous year.

28. (i) and (ii) In cotton mills the control of temperatures and humidification is carried out according to rules recently introduced.

29. (i) There is no industrial disease in the industries carried on in Cawnpore.

(ii) No general figures are available relative to the working classes, as distinct from the general population.

In one group of industrial settlements, with a population of approximately 7,000, there were, on an average of four years, 25 cases of *Kala Azar*, 5,550 cases of malaria, 4.75 of cholera and 1.25 of hookworm, treated in each year.

30. The difficulties in the way of the introduction of a system of sickness insurance appear to render such a scheme impracticable.

Not the least of these difficulties is the fact that the institution of any system of sickness insurance would render it imperative on employers to see that none but healthy persons were employed. This would lead immediately to the dismissal of many of the present workers.

In any event employers could not accept such a system unless it were made compulsory, the employee being required to contribute to it. They would also expect Government to assist in financing it.

31. Women are normally employed in the Cawnpore factories only to a very small extent, but where they are employed it is understood that maternity benefits are granted when the occasion arises.

### V.—Welfare.

32. One group of employers has, by reason of the establishment of industrial settlements, been able to enter on a scheme of welfare work which has yielded good results.

Another group has also now entered on welfare work, and has laid down the initial lines of development.

The schemes embrace education, both juvenile and adult, recreation and physical development, co-operative stores and co-operative banks.

33. It has been found necessary to retain a whole-time paid staff of welfare officers and workers.

34. (i) Facilities are afforded in practically every mill and factory for the vending, on the premises, of refreshments. The provision of iced water is established in certain mills, and is being adopted in others.

Creches are set up in certain mills and are utilized.

(ii) and (iii) Where welfare work is progressing provision has been made for playgrounds, implements of sport, reading rooms and libraries. Troops of boy scouts have been embodied, and amateur dramatic societies set up. Annual sports are held, cinema shows given, and wrestling competitions encouraged. *Kathas* (reading of Hindu scriptures) are held, and other developments in this and similar directions are freely permitted.

35. The results are understood to be satisfactory in the direction both of establishing better relations between the employer and the employee, and of removing communal tension. The mental and physical improvements resulting cannot be accurately gauged but must necessarily exist.

It is perhaps inevitable that by some individuals these activities on the part of employers are regarded with suspicion. But on the whole the welfare work performed is accepted at its true valuation, by the employees. As the work develops, its growth and management pass more and more into the hands of the employees themselves, and this fact is being recognized by them.

36. (i) and (ii) In the case of one group of employers the following educational facilities are provided in the industrial settlements :—(a) Night schools for adults ; (b) boys' schools and girls' schools ; (c) technical classes.

In the case of another group a boys' school and a girls' school are maintained in the workers' settlement.

In neither case is any assistance received from Government or the municipality.

(iii) These schools are open to workers' children exclusively.

(iv) These schools are used to their full capacity, and their extension is under consideration. The average attendance represents over 80 per cent. of the enrolment.

37. Pensions or gratuities are given to deserving workers on retirement. There are, however, no established rules on this subject.

### VI.—Education.

40. The Cawnpore municipality is carrying out more than its statutory obligations in the matter of education. Compulsory primary education has been introduced in some of the city wards, and is being extended to others.

It is understood that, save in the matter of technical schools, the question of adult education has not received as much attention as it deserves.

### VIII.—Workmen's Compensation.

51. (i) The Workmen's Compensation Act is in universal use.

(ii) All claims are met and, in fact, in many cases the employer does not wait for a claim to be made before taking steps for the payment of compensation.

(iii) It is a burden on industry but is willingly borne.

(iv) Insurance facilities are freely available, and in a large majority of cases are taken advantage of. From the workers' point of view the only advantage seems to be in the case of the small employer who might not otherwise be able to meet claims.

(v) As far as the larger industries are concerned, compulsory insurance does not seem to be either necessary or desirable.

52. The Committee of the Chamber quote paras 1 and 2 of a letter dated the 22nd April, 1929, to the United Provinces Government :—

*" No. 1. To what fresh classes of employees, if any, should the Act be extended ?*

*" The Committee agree with, and desire to emphasize the opinion stated by the Government of India in para. 3 of their letter, that ' the endeavour to introduce any scheme of compulsory insurance at any rate in unorganized industries, would be attended by serious administrative difficulties.' They go further, and desire to state their view that any scheme is, for this reason, impracticable, and that therefore the extension of the Act to unorganized industries generally is not feasible.*

*" In regard to the specific question as to additions to Schedule II of the Act the Committee recommend that the schedule be extended to bring in :—(a) General constructional and engineering works and dam construction and road-making ; (b) motor-bus drivers and contractors and taxi-drivers.*

*" They further recommend that subhead (c) of head VI of the schedule be amended, so as to apply to bridges of more than 20 feet in length, in place of 50 feet as laid down.*

*" No. 2. Should any provisions be introduced for securing workmen against possible loss by reason of the inability of their employer to pay any compensation that may be due ?*

*" The Committee are of opinion that the workmen of employers who effect insurance are protected in this respect, and that, as regards the remainder, if it is admitted that compulsory insurance is impracticable, no provision of this nature can be suggested."*

53. (i) The Committee quote para. 4 of the above mentioned letter :—

*" No. 4. Should the scales of compensation be enhanced either for the more poorly paid workmen or generally ?*

*" The Committee recommend that, save in regard to the two lowest grades, the scale of compensation set out in Schedule IV is adequate, having regard to the general standard of wages in India. The present two lowest grades, giving an assumed wage of Rs. 8 and 10, should be abolished, and the lowest grade should be the third now shown, giving an assumed wage of Rs. 12 per mensem."*

(ii) The Committee quote para. 5 of the above mentioned letter :—

*" No. 5. Should the awaiting period be reduced either generally or in the case of those workmen who are disabled for more than ten days, and if so, to what extent ?*

*" The Committee recommend that the present waiting period of 10 days should be maintained, but that the principle of ' dating back ' be introduced, operating as follows :—(a) If the disablement, when duly certified after medical examination, does not extend beyond 20 days, there should be no ' dating back ' ; (b) but if the disablement extends beyond 20 days, but not beyond 30 days, it should be dated back to the sixth day after disablement, i.e., the injured worker would not receive pay for the first five days after injury ; (c) If the disablement extends beyond 30 days it should be dated back to the actual day of disablement, i.e., the injured worker would receive pay from the date of injury."*

(iii) See reply under head 29 (i).

(iv) The machinery is undoubtedly regarded by the worker as cumbersome and slow moving.

### IX.—Hours.

#### A.—Factories.

55. (i) The normal custom in Cawnpore is to work a ten-hour day for six days a week.

(ii) In actual work, allowing for time men are away from their machines, it may be said that 8 to 8½ hours work only is performed.

Overtime work is not exacted—or ordinarily permitted under the Factory Rules—except in the engineering department for general maintenance.

56. In textile and most other industries a 6-day week is universal.

In the case of sugar refineries a 13-day fortnight is the rule.

57. (i) The effect on workers is in no way detrimental.

(ii) While the reduction in working hours has been accompanied by a measure of greater efficiency in the case of piece workers, it has also been accompanied by a definite loss in output, more especially in the case of men on a daily wage.

The effect on industry has certainly been adverse in competition with China and Japan, and this is more marked since this competition has, recently, been intensified.

59. Any further reduction in working hours would be most harmful to industry, until such time as the Indian worker has become more efficient.

60. (i) The existing practice in Cawnpore is a one-hour break in the middle of the day. The workers have expressed no desire for the alternative of two half-hour intervals; (a) The practice is satisfactory in relation to fatigue. It must be remembered that all workers snatch intervals during working hours for rest, relief or refreshment; (b) The interval is convenient for the meal times of such workers as indulge in a midday meal. A large number actually take their meals during working hours.

(ii) The law is regarded as suitable.

(iii) The hours are suitable.

(iv) By agreement with the workers the employers of Cawnpore generally grant 14½ holidays per year, other than Sundays, on festivals.

61. (i) The existing practice of a day of rest on Sundays is universal.

(ii) The law is considered to be suitable.

62. Exempting provisions have now been reduced to a minimum. In some cases these restrictions result in inconvenience and loss of output.

#### D.—Other Establishments.

78. There are many industrial establishments, *e.g.*, durrie making factories, shoe factories, brick kilns, etc., which do not come within the Factories Act.

The knowledge which the Chamber has of them goes to show that it would be beneficial to have them brought under some measure of control.

### X.—Special Questions relating to Women, Young Adults and Children.

#### A.—Factories.

81. There has been a distinct reduction in the numbers of women and children employed in the Cawnpore mills and factories since the Act was amended in 1922.

82. When women are employed infants are admitted to factories. Creches are provided, where women employees are required to leave their infants.

83. The regulations are considered suitable.

84. Where children are employed the regulations are suitable. The numbers employed are, however, very small, and are decreasing. (i) *Hours*, 8 to 12, 2 to 4, as provided in the Factories Act; (ii) *Ages*, twelve to fifteen.

### XII.—Wages.

96. (i) A Statement is appended (Appendix I) giving the average actual monthly earnings of workers in the following industries carried on in Cawnpore.

(i) Textile industries.

(ii) Ginning and pressing factories.

(iii) Engineering and iron works.

(iv) Sugar works.

(v) Tanneries and leather works.

These averages do not represent the earnings in any one particular mill or factory, but are averaged as between two or more in the same industry.

(iii) There are no payments in kind, save in the case of factory guards and peons, who have clothing issued to them free, and are provided with free quarters.

In the case of workers accommodated in workmen's settlements maintained by employers the rent charged is invariably less than that at which they could obtain similar accommodation elsewhere. The difference between the two may be said to have a money value. It is difficult to state it in precise terms.

97. (i) and (ii) As between 1920 and 1928 there has been no marked increase in wages and certainly no decrease.

During the period 1919-1920, wages advanced, by reason of the high cost of living, by approximately 25 per cent. of their previous level.

(iii) Although wages have been maintained at the same level as between 1920 and 1928, commodity prices and the cost of living have fallen.

(iv) Speaking generally, while wages have been maintained at the same level as between 1920 and 1928 profits have declined, in some cases to vanishing point.

98. Since the workers have, to a large and increasing extent, severed their connection with their villages, the amounts sent by workers to villages are understood to have declined.

99. Payment in kind does not exist in Cawnpore.

100. Speaking generally, the mills and factories exercise no control over payment by contractors to their workers. But, as has been shown in the reply under head 15, contractors are employed sparingly, if at all.

101. (i) Agreements with individual workers are as a rule not entered into.

(ii) The management, in consultation with overseers, fix the wages to be paid for a certain class of work, and when a new worker is entertained he is informed of and is required to accept the wages applicable to his employment.

102. The minimum requirement laid down in the Indian Factories Act is a time and a quarter. In actual practice a higher rate, even up to double time, is paid. There is little if any overtime work.

103. There is no standardisation either of muster or of rates as between mill and mill in Cawnpore.

104. There have been no notable wage changes in the area since 1920. The wage changes of 1919-20 had no effect on the labour supply.

105. The statutory establishment of minimum wages is inadvisable and would, it is believed, be impracticable.

106. All the points under this head are covered by an extract from a letter addressed by the Chamber to the Director of Industries, United Provinces, on the 18th of January, 1927, which is quoted in Appendix 2. The position is to-day unchanged.

107. (i) (a) Monthly and (b) Fortnightly or alternatively, semi-monthly.

(ii) From 6 to 14 days.

(iii) All the points under this subhead are covered by a letter addressed by this Chamber to the Deputy Secretary to Government, Industries Department, on the 4th December, 1924, conveying the opinion of the Chamber on the Weekly Payments Bill then before the Legislative Assembly, a copy of which is attached as Appendix 3. The opinions then expressed remained unchanged today.

(iv) Wages claimed after due date for payment are paid on demand after investigation.

Wages entirely unclaimed remain available to claim for the statutory period. Thereafter they are, in nearly all cases, devoted to some form of welfare work.

109. It cannot be said that bonus and profit sharing schemes are adopted generally in Cawnpore. Bonuses are paid when profits render it possible.

110. (i) Leave is taken freely but not systematically, although figures obtained in one concern show that about half the total number of workers absent themselves for short periods on an average twice a year.

(ii) No impediments are placed in the way of workers desiring to take leave. Assistance is sometimes given to old workers with good service, but ordinarily assistance is not afforded.

(ii) Back-lying wages are in such cases paid on the workers' return.

### **XIII.—Industrial Efficiency of Workers.**

112. While the efficiency of the machinery has improved of recent years it cannot be said that the efficiency of the workers has improved in the same ratio.

Obviously the longer a man is at his trade the more he should improve but adaptability to changing circumstances is not an outstanding characteristic of the Indian worker.

113. As an example it may be cited that in Cawnpore the large majority of weavers in cotton textile mills attend no more than two looms, whereas in England one worker serves 4 looms. In Japan the average is one weaver to 5.5 looms.

It may be averaged, not unreasonably, that the efficiency of the Indian worker is from one-third to one-half that of his English confrere.

**XIV.—Trade Combinations.**

117. (i) Employers in Cawnpore and the vicinity are organized only through Chambers of Commerce.

118. It is recognized that properly organized and well conducted labour unions which are truly representative of, and managed by, the workers themselves, are bound to have a beneficial effect on industry.

The Chamber is, however, regretfully compelled to state that the main existing Labour Union of Cawnpore, the Mazdur Sabha, does not satisfy these essential conditions.

The effect of an ideal organization, such as is referred to, on the conditions of workers themselves should also be beneficial. But it is in this direction more than any other, perhaps, that the existing organization is believed to have failed.

The organization of employers, even by the indirect means of Chambers of Commerce, has, in every way, been beneficial not only to industry but to the workers.

120. (i) The Mazdur Sabha is understood to have been inaugurated in 1919. It is believed to have been registered in 1928.

(ii) The attitude of workers towards the Sabha is reported to employers to be generally apathetic. When strikes are in progress the membership swells.

The Chamber has little information as to the control now exercised by workers over the Sabha, but it is known that neither the President nor the Secretary has any direct connection with industry.

(iii) The attitude of employers towards the Sabha has generally been that of non-recognition, due to the facts that the large majority of their employees are not members, and that the control of the Sabha is not vested in the workers themselves.

121. (i) It is understood that the Act has been utilized to the extent that five labour unions have been registered in these Provinces.

(ii) The attitude of employers towards the Trade Unions Act may perhaps be best judged from the extract from a letter addressed by the Chamber to the United Provinces Government in November, 1924, on the Bill when it was introduced. This is attached as Appendix 4.

122. (i) In the answer under Head 13 reference has been made to the entire accessibility of workers to the management. Negotiations between employers and employed are generally, and most satisfactorily, effected by this means.

(ii) There has not been any systematic attempt to bring about co-operation between employers and employed to the end of increasing efficiency of production but individual efforts are constant within the mills to induce the worker to realize the importance to himself of improved efficiency.

**XV.—Industrial Disputes.**

123. The industries of Cawnpore were entirely free of strikes prior to 1919. In that year a concerted movement took place which resulted in practically simultaneous strikes in most of the industries.

The causes were undoubtedly economic stringency and the general wave of unrest of those times. The employers, as a body, met the representatives of the employees and a frank and free discussion ensued.

Prior to this meeting wages had in many cases been advanced and further adjustments were subsequently made, the nett result of which was that in 1919 and 1920 there was a general advance of approximately 25 per cent. in wages. Other matters decided related to holidays, working hours, working conditions in factories, and bonuses.

Small sporadic strikes occurred in various industries in every year from 1921 to 1924, two of which were serious.

The years 1925-27 were free of strikes.

124. (i) In 1919, the Chamber approached the United Provinces Government with suggestions for the formation of Boards of Conciliation. The matter was taken up and proposals were put forward some of which the Chamber was unable to accept. In the event the Chamber dropped the matter as it was concluded that, in the then conditions of labour organization, it would not be possible to have labour properly represented on any such Boards.

(ii) There has not been any official action towards conciliation in settling trade disputes but officials have functioned beneficially as intermediaries in bringing about the settlement of individual disputes in the past.

(iii) The Employers and Workmen's Disputes Act, 1860, has never been used.

(iv) At one time it was hoped to be able to set up works committee but experiments in this direction failed.

(v) The entire accessibility of workers to their employers has been touched on elsewhere.

The existence of this accessibility and its free utilization must be stressed.

In times of excitement or general unrest individuals have, on occasion, preferred to take their complaints, in the first instance, to the Mazdur Sabha but even in these cases the course provided of direct resort to the employer was eventually adopted. Normally, however, the employer expects and receives the confidence of his employees in the matter of complaints.

(vi) Under existing conditions they do not appear to be applicable. Labour is not yet correctly organized.

125. The Act is not yet generally operative in these Provinces as the Provincial Rules under the Act have only just been published.

In regard to public utility companies the Act is operative and is likely to be beneficial.

126. The only point on which the employer is inclined to be critical of the attitude of Government towards industrial disputes is in regard to the ineffective measures against picketing.

#### **XVI.—Law of Master and Servant.**

127. The repeal of the Workmen's Breach of Contract Act has been distinctly harmful in its effect on employers importing skilled labour at the risk of considerable outlay in advances.

In the case of employers handling large engineering works in remote districts, requiring the importation of large numbers of unskilled labourers, the removal of the protection to the employer formerly afforded by the Act has also been harmful.

128. Generally there are no contracts as between workers and their employers, save in the acceptance, generally signified by signature or thumb mark, by the employee of the factory rules. Workers on the time scale are, usually, fortnightly servants. Piece-workers are also, by factory rules, employed subject to a fortnight's notice.

129. The civil law is seldom utilized by and the criminal law is now not available to the employer for the enforcement of service entered on by the employee.

The employee also seldom, if ever, utilizes the law to enforce continuance of his employment if this is threatened.

Cases of resort to the law to enforce payment of wages are very occasional.

132. It is never used.

#### **XVII.—Administration.**

133. The action and attitude of the Legislatures, both Central and Provincial, have generally been in the direction of benefiting the workers.

The justice of this is recognized by the employer whose only objection lies in the fact that this legislation has descended on him within recent years in a perfect spate.

138. The Provisions of Section 36 of the Indian Factories Act regarding the display of vernacular abstracts of the Act and Rules are invariably observed.

Owing to the large measure of illiteracy which obtains among factory workers this facility afforded to the workman of acquainting himself with factory legislation is less effective than was intended by the Act. But it is known that literate workers read out any notices displayed to those unable to read.

139. (i) Notwithstanding the recent provision of an Assistant Inspector of Factories the staff is inadequate, but in spite of the inadequacy of the staff the inspections under the Act have, in Cawnpore, been numerous and efficiently carried out.

(iii) It is necessary to make clear that the sane and reasonable employer welcomes factory inspection and that where inspections are carried out with proper regard to the provisions of the Act and Rules, such inspection cannot be too rigorous or efficient, from the reasonable employer's point of view.

(iv) Prosecutions are few for the reason that the provisions of the Act and the Rules are, in general, strictly observed.

## APPENDIX I.

(Head 96)—Statement showing Average Actual Monthly Earnings in Various Industries.

							Average actual monthly earnings.		
							Rs	a.	p.
(i) (Textile Industries.									
(A) Carding (omitting mistries)—									
(1)	Openers and scutchers	..	..	..	..	..	17	9	2
(2)	Drawing frame tenters	..	..	..	..	..	31	7	4
(3)	Slubbing, inter and roving tenters	..	..	..	..	..	30	8	0
(4)	Doffers	..	..	..	..	..	12	1	6
(5)	Grinders (carders)	..	..	..	..	..	18	14	3
(B) Spinning (omitting mistries)—									
Mules.—									
(1)	Minders	..	..	..	..	..	35	5	4
(2)	Piecers	..	..	..	..	..	21	13	4
(3)	Doffers	..	..	..	..	..	12	8	0
(4)	Bobbin-carriers	..	..	..	..	..	17	11	0
Ring.—									
(1)	Minders	..	..	..	..	..	18	10	6
(2)	Piecers	..	..	..	..	..	17	6	1
(3)	Doffers	..	..	..	..	..	12	8	9
(4)	Bobbin-carriers	..	..	..	..	..	18	4	11
(C) Weaving (omitting mistries).—									
(1)	Winders	..	..	..	..	..	26	6	2
(2)	Beamers or warpers	..	..	..	..	..	34	15	4
(3)	Sizers	..	..	..	..	..	26	0	0
(4)	Drawers or healders	..	..	..	..	..	36	8	0
(5)	Weavers	..	..	..	..	..	39	1	4
(6)	Folders	..	..	..	..	..	17	2	7
(7)	Stampers	..	..	..	..	..	18	8	5
(8)	Bundlers	..	..	..	..	..	17	8	8
(9)	Balers	..	..	..	..	..	18	3	6
(D) Dyeing.—									
	Dyeing men	..	..	..	..	..	17	3	0
(E) Reeling.—									
(1)	Reelers male	..	..	..	..	..	24	11	8
(2)	Reelers female	..	..	..	..	..	18	4	5
(F) Mill Mistries or Overseers.—									
(1)	Carding :—(a) Head Mistries	..	..	..	..	..	109	14	0
	(b) Line Mistries	..	..	..	..	..	49	0	0
(2)	Ring :—(a) Head Mistries	..	..	..	..	..	92	0	0
	(b) Line Mistries	..	..	..	..	..	41	2	8
(3)	Mule :—(a) Head Mistries	..	..	..	..	..	97	10	8
	(b) Line Mistries	..	..	..	..	..	50	5	2
(4)	Weaving :—(a) Head Mistries	..	..	..	..	..	169	10	0
	(b) Line Mistries	..	..	..	..	..	86	2	8
(G) Power Department.—									
(1)	Engine mistries	..	..	..	..	..	47	10	8
(2)	Firemen	..	..	..	..	..	21	6	8
(3)	Coalmen	..	..	..	..	..	15	12	0
(4)	Fitters	..	..	..	..	..	34	10	4
(5)	Turners	..	..	..	..	..	35	1	9
(6)	Blacksmiths	..	..	..	..	..	28	12	3
(7)	Tinsmiths	..	..	..	..	..	28	2	5
(8)	Hammer-men	..	..	..	..	..	17	1	0
(9)	Carpenters	..	..	..	..	..	26	14	8
(10)	Oilers (including lineshaft oilers in all departments)	..	..	..	..	..	17	2	0
(11)	Electricians	..	..	..	..	..	77	0	10
(12)	Wiremen	..	..	..	..	..	35	5	4
(13)	Switch-board attendants	..	..	..	..	..	35	12	0
(14)	Mochies	..	..	..	..	..	19	1	4





## APPENDIX II.

(Head 106).

*Extract from a letter dated 18th January, 1927, from the Upper India Chamber of Commerce, to the Director of Industries, U.P., relating to Fines.*

Government has referred to the greater need for the protection of the workman in this country, where the great mass of workmen are illiterate and ignorant and have not the assistance of strong labour unions, but these very factors operate, in this matter, as in others, against the employer in far greater degree than against the workman. Concomitant with the ignorance and illiteracy of the Indian worker are the facts that, with microscopically few exceptions, he takes no pride in his work, does just as little as he can with the minimum of trouble and effort to himself, and is entirely satisfied if his output just passes inspection and is paid for.

His ignorance, and, in many cases, his inadaptability, cause much loss to his employer in tools, machinery and material. His insanitary habits impair factory discipline and imperil his fellow workers, while the utter futility of moral suasion, and the absence of any corporate feeling or of any fear of public opinion, make it necessary for his employer to adopt methods in dealing with him which would seldom be necessary in most other countries.

These facts are abundantly borne out by the reference which my Committee have made to the manufacturing members of the Chamber in this matter. All are absolutely agreed that the abolition of the system of levying fines, when deserved, is impossible if industry is to continue, and, while some are agreed that regulation may be desirable, their own statements show that in their factories, this desirable regulation already exists and that their recommendations are in regard to cases where there is no such regulation. Such cases among the factory employers represented on this Chamber have not come to knowledge.

From the replies received it is certain that :—

(a) Every employer is compelled to inflict fines on some of his workmen on occasion and that the maximum number so punished in any period does not exceed 3 per cent. of the persons employed in that period.

(b) That deductions from wages are of two kinds :—

(1) Disciplinary fines inflicted as punishment for disobedience of orders, irregularity in attendance, uncleanness and breach of sanitary rules, and quarrelling and fighting in the factory.

(2) Compensatory deductions for damage done to tools, machinery and material. Save in certain textile mills, where a weaver spoiling a piece of cloth is required to purchase the piece at the market price, the realisations from these compensatory deductions amount to perhaps 4 annas per hundred rupees of the wages earned.

The practice of requiring the weaver to buy the cloth he spoils, and which is of recent introduction in some mills, has had a noticeable and valuable effect as a deterrent. Such cases are believed not to exceed one per cent. among the men employed, or represent more than 10 per cent. of the offender's earnings.

(3) Instances are not uncommon of workmen having been found tampering with the indicators on machines showing work output. Such cases of attempted fraud are in most cases punished with instant dismissal and the lenient punishment of a fine for such an offence is exceptional.

(c) In nearly all cases the proceeds of disciplinary fines, and in some cases even compensatory deductions are, entirely as a matter of grace, credited to some fund for the benefit of the workmen themselves, such as recreation funds, or dispensary contributions.

## APPENDIX III.

(Head 107).

*Copy of a letter from the Upper Indian Chamber of Commerce, to the Deputy Secretary to Government, United Provinces, Industries Department, Allahabad, dated the 4th December, 1924.*

Prior to receipt of your letter the members of the Chamber had been invited to state their opinion on the Bill and it may be said, succinctly, that seldom has any proposal of legislation which has come before the members of this Chamber been so entirely condemned as unnecessary, ill-advised and objectionable as has the Weekly Payments Bill.

The objection on the part of employers is not only to the purpose and the probable effects of the Bill but to the entire gratuitous aspersion on employers contained in the Statement of Objects and Reasons.

But perhaps the most important opinion on the ill-advisability of the Bill comes, not from the employer, but from the worker. An enquiry recently instituted by the Committee of the Bombay Millowners' Association in order to ascertain the views of the mill operatives of Bombay as to the desirability of introducing a system of fortnightly payment has made it clear that a very large majority of the operatives there prefer the present system which obtains in Bombay of monthly payments.

In these provinces, and particularly in Cawnpore, a system of fortnightly or semi-monthly payments has been in vogue in several of the mills and factories during the last few years. In the case of such mills the system has been introduced to meet the wishes of the workers, but it has not been found free of disadvantages.

As to how a system of weekly payments would be regarded may be judged from a communication from a welfare worker in Cawnpore who has been at pains to obtain the opinion of the workmen in the group of factories, comprising four separate industries, among the largest of their kind in Cawnpore, in which he is interested. He writes :—

"I have talked with a good number of men, especially those of the unskilled class, and without exception they prefer the wages paid fortnightly. I will give you a few of their arguments.

"They said, 'now we buy our grain and supplies fortnightly. We go to the main bazaar and buy, where we are able to get better rates than we get locally. We receive about seven rupees fortnightly. Who would go to the main bazaar with half that amount? It would mean that we would buy the weekly supply in a local bazaar at a higher rate.

'Now after we have bought our supplies for a fortnight we take the money remaining and send it to our villages, or put it away as savings. If we received the wages weekly we would spend any balance remaining on vegetables and sweets. We would save nothing.'

"As far as credit at the shopkeepers is concerned, none has any hope that the shopkeeper would make any reduction in price in view of being paid weekly instead of fortnightly."

The Indian factory owners, who are members of the Chamber, condemn the Bill strongly, and the arguments put forward by them are based on intimate knowledge of the conditions, needs and desires of their workers. These arguments are of such weight that they cannot be resisted. They state explicitly that the introduction of the system of weekly payments will not be beneficial to the workers as there would be a general tendency to spend the money received weekly on pleasures and petty and unnecessary purchases, with the result that there would be little left to purchase clothing and other necessities. It is said, with evident knowledge, that the practice of weekly payments would tend to an increase in the already harmful habit of workmen of absenting themselves from work for a day or two after receipt of their wages.

One Indian factory owner enquires pertinently whether the Bill is the outcome of representations from actual labourers, and, if not, whether any attempt had been made before the Bill was framed to consult Labour on the subject. This owner draws from the Bill, and from the Statement of Objects, and Reasons the not unreasonable conclusion that the framer of the Bill appears to be utterly ignorant of the habits of workmen or he would not otherwise have taken it on himself to introduce the Bill.

The belief that the weekly payment of wages will get the Indian workman out of the clutches of the money lender is a fallacy. It is not the withholding of wages for a fortnight or a month which makes the workman the prey of the money lender, but rather his improvidence in the matter of marriages, funerals and domestic religious ceremonies.

There would appear to be as much malice as ignorance behind the assertion that the workman needs to be saved from the clutches of mill managers and mill agents. Labour conditions in these provinces certainly go to repudiate this wild statement very completely.

The objection to the payment of wages weekly to domestic servants will naturally be more widespread than the objection to the weekly payment of factory workers. Any such legislation can with propriety only follow the adoption by Government itself of a system of weekly payments of the salaries of all its servants from the highest to the lowest. Then would ensue a similar system by all other large employers in the country. Without these precedent steps it would be unfair in the extreme to the private employer of small means to expect him to pay his domestic staff weekly

while he was himself dependent on a monthly wage. The same objections regarding the squandering of small sums without any resultant advantages would apply to domestic servants, as are obvious in the case of factory workers, while the risks of dishonesty and pilferage would enormously increase.

This Chamber must record its strongest disapproval of the Bill in its entirety.

#### APPENDIX IV.

(Head 121).

*Extract from a letter dated 24th November, 1924, from the Upper India Chamber of Commerce, Cawnpore, to the Secretary to Government, United Provinces, Industries Department, Allahabad.*

They (the Committee of the Chamber) recognize the advisability of the introduction of legislation which will furnish a measure of protection to genuine Trade Unions. They further recognize that the provisions of the present Bill go a considerable way to meet the objections put forward by the Chamber in their letter of the 9th January, 1922, to the proposals then advanced by Government for the registration and protection of Trade Unions in India. On one point however the present Bill has, of intention, avoided an issue raised on the previous occasion, and that is the question of picketing. The Government of India's covering letter refers to this subject and indicates the reason why the Bill does not include any provisions relating to picketing. The Committee of the Chamber are however still strongly of opinion that this very important subject should be included in the Bill. They desire to reiterate the opinion conveyed in 1922, when they said :—

"My Committee desire strongly to endorse the conclusion arrived at by the Government of India that it would be most undesirable in the present stage of the labour movement to countenance picketing in any form, and that a definite responsibility should be laid on the unions or their executive committees, for the prevention of the issue of any orders authorising picketing in any form by the members of the union. The recent Hartals and the exploitation of factory labour by politicians to make political demonstration against the Government indicate another aspect of the dangers attendant on picketing and make it all the more necessary that the public, the employer, and the workman himself, should be afforded the utmost protection possible against that form of wholesale intimidation which passes under the name of 'peaceful picketing.'"

The Government of India now lay stress on the point that there is considerable force in the objections which have been advanced against the inclusion in the Bill of an embargo on picketing. It is said that the experience of the last few years has not revealed any urgent necessity for imposing a general restriction on picketing, and Government is seemingly solicitous of the good opinion of Trade Unionists who are willing to confine picketing to systematic persuasion. According to Government's present view those in whose hands picketing degenerates into intimidation can be dealt with by the ordinary criminal law. This change of opinion on the part of Government, as compared with the views stated in para. 27 of their letter of the 12th September, 1921, is the more extraordinary in that the disturbances following the recent Bombay strikes should have shown clearly that the evil effects of picketing are not prevented by the present provisions of the Indian Penal Code.

The Committee of the Chamber therefore strongly urge that the present Bill should definitely carry out the intention expressed by the Government of India in their letter No. 1344 of the 17th October, 1921, and lay a responsibility on all registered unions, or their executive committees, for the prevention of the issue of any orders authorising picketing in any form by the members of the Union.

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#### PART I.

##### *Diet of the Indian Worker.*

It has been observed that differences of climate affect the food requirement of workers. Maurel, a French physician, estimates that the number of calories necessary for a male adult weighing 55 kilograms and performing light work varies theoretically from 1,650 in hot seasons in hot climes to 2,750 in cold seasons in cold climes. Hard work has been done in India and Japan on the basis of 2,000 calories as compared with 5,000, which was the British war ration, and 3,300, which is estimated to be the average requirement of a Britisher engaged in secondary pursuits.

Much depends also upon the general standard of physical measurement. The food requirement of an average American is based, for instance, on the average body weight of 70 kilograms (154 pounds). In India we have to base our calculations on an average weight of stock. The weight of an Indian has been found among different tribes and communities to be less than 10 to 20 per cent. of the standard weight of a European. Professor Morimoto estimates that a Japanese may be fairly expected to consume only 80 per cent. of what a foreigner needs, for the average weight of a Japanese is only 13 kwan, 830 momme, to the European's 17 kwan 20 momme.

Again, the level of nitrogenous equilibrium of peoples differs. It has been found that among Eastern peoples whenever the nitrogenous element is increased there is greater increase of foecal nitrogen. No doubt, both for meat as well as for vegetable proteins, there is greater assimilation of nitrogen among Europeans than among Asiatics. In India, clinical researches tend to show that the level of protein consumption, which is sufficient for health subsistence and normal efficiency of an adult stands much lower than the same level for the European adult, being 50 to 70 per cent. of the latter's requirements. It is obvious that in the dietary there are two needs which are satisfied, viz., the nutritional, and the energy needs of the body. If in the system of diet that prevails a race depends more on carbo-hydrates than on proteins for the energy needs of the body, there is a tendency for the nitrogenous assimilation to suffer. As a result, whenever an excess of nitrogen, obtained from meat or vegetable protein is introduced into the body, its assimilation is poor and there is an increase of foecal nitrogen. This will not occur in the case of a people which depends chiefly on the protein food for the energy giving function.

*Comparison of Food Consumption.*

	Grams of protein per man per day.	Calories from all sources.
1. Standard requirement for men at moderate work in the western countries (Atwater) ..	125	3,500
2. For hard work .. .. .	150	4,500
3. British war ration .. .. .	175	4,855
4. Average man (Royal Society Food War Committee) .. .. .	100	3,390
5. Fourteen families in York (wages under 26s.), (Rowntree) .. .. .	89	2,685
6. Twelve labourers' families in New York (Wilson) .. .. .	101	2,905
7. For light work in Japan (Oshima) .. .. .	100	3,000
8. For hard work (Jinrikshaman) (Oshima) ..	158	5,050
9. Twenty middle-class families in Shantung (Adolph) .. .. .	111	3,355
10. Artizan family in Bengal .. .. .	40	2,283
11. Bengal prison diet (McCay) .. .. .	93	3,500
12. Standard military ration in Baroda (Mrs. Strong) .. .. .	86	2,400
13. Standard army ration in Baroda for followers ..	86	2,077
14. For muscular agricultural work in the United Provinces .. .. .	100	2,400

Chittenden's figures of the nitrogen metabolized per kilogram of body weight may be compared with Volt's, McCay's and Oshima's figures as follows :—To these have been added figures obtained at the Physiological Laboratory, Lucknow University.

Bengalies and Ooriyas (rice diet, largely) .. .. .	116–120
Chittenden .. .. .	120–130
Biharis and Eastern Bengalies .. .. .	140–160
Japanese poor classes .. .. .	177
Nepalese .. .. .	180–250
Sikkim Bhutias .. .. .	250
Average European .. .. .	270
Tibetan and Bhutan Bhutias .. .. .	350
Nepalese Bhutias .. .. .	420*
Average European in India .. .. .	224 (McCay)
United Provinces, peasant .. .. .	092
United Provinces, middle class .. .. .	140
United Provinces, factory hand .. .. .	100

\* Castellani and Chalmers : " Manual of Tropical Medicine," p. 100.

Since the investigations of Chittenden and Hindhead the conviction gained ground that the number of calories which had formerly been considered necessary for a good working diet was much too high. Above all the quantity of proteins could be reduced to almost half that which was formerly considered indispensable. In Germany it has been estimated during the last war that the population was over-eating to the extent of 59·7 per cent. calories and 44 per cent. in protein. When rations in all the armies had to be restricted the suggestions of physiologists were carried out in practice, especially among the Germans, whose offensive power and resistance were not affected thereby.

Burridge finds from a recent survey of the peasant's diet in the United Provinces that it gave its caloric energy as 2,400, and allowing for 10 per cent. waste, as 2,160 as against 3,500 for a British workman of 67 kilogram weight working eight to nine hours per day, but the latter diet would not be suited for work in the Indian sun as is that of the Indian coolie, who is very much in the dietetic position that the non-fighting German population were during the war. He observes: "It is evident then that whenever it is easily possible for heat production to outstrip heat loss, work can be more safely and economically done at the expense of fats and carbohydrates, and the low nitrogen value of Indian diets has probably been determined through this factor. It may be that the virile race develops in a particular country because its climate makes a high nitrogenous exchange possible. The Indian ryot, according to European standard, has a low level of nutrition, which may cause fatalism but may fit him better for his actual task."\* A further and detailed investigation at the Physiological Laboratory, Lucknow University, of the basal metabolism of a peasant of the United Provinces showed that the number of calories needed was about 1,200 calories. This estimate has been reached scientifically and is reliable.†

A survey has been undertaken of the grades of workers in Cawnpore, and their dietaries and caloric energies tabulated as follows:—

(i) A working-class family of the lowest grade. Income Rs. 12 per mensem. The family consists of the worker and his wife and two children, aged eight and six.

Consumption per week.	Quantity.	Calories.
1. A mixture of wheat, gram and barley (in the proportion of 2 : 1 : 1) .. .. .	14 srs.	34,943·1
2. Arhar dal .. .. .	2 srs. 10 ch.	5,672·0
3. Vegetables .. .. .	$\frac{1}{2}$ sr.	315·6
4. Gur .. .. .	3 $\frac{1}{2}$ ch.	401·8
5. Meat‡ .. .. .	$\frac{1}{2}$ sr.	1,006·4
		<hr/> 42,338·9

Calories per adult worker per day .. 2,34

(ii) A working-class family of the middle grade. Income Rs. 25 per mensem. The family consists of a single adult worker.

Consumption per week.	Quantity.	Calories.
1. Wheat flour .. .. .	5 srs. 4 ch.	13,041·7
2. Rice .. .. .	14 ch.	2,916·2
3. Arhar dal .. .. .	14 ch.	2,289·0
4. Vegetables .. .. .	4 ch.	158·3
5. Ghee .. .. .	7 ch.	3,142·0
6. Oil .. .. .	$\frac{1}{2}$ ch.	112·2
7. Milk .. .. .	3 $\frac{1}{2}$ srs.	2,226·0
8. Salt .. .. .	—	—
		<hr/> 23,885·4

Calories per adult worker per day .. 3,412

\* Royal Commission on Agriculture, Vol. I, Part I, Evidence, page 157.

† Niant Dhan Banerjee conducted certain experiments in King George Medical College Laboratory.

‡ Meat is consumed, however, only for one or two days in a month. A meat week's diet is taken here. For ordinary days the diet yields 2,393 calories, with vegetables (which are a substitute for meat and dal) the diet yields 2,077 calories.

(iii) A working-class family of the highest grade. Income Rs. 40 per mensem. The family consists of the worker and his wife and three children aged nine, three and a-half and one.

Consumption per week.					Quantity.	Calories.
1. Wheat flour	..	..	..	..	14 srs.	34,739·6
2. Rice	..	..	..	..	3½ srs.	11,663·8
3. Arhar dal	..	..	..	..	2½ srs.	11,629·0
4. Ghee	..	..	..	..	7 ch.	3,141·6
5. Oil	..	..	..	..	1 ch.	448·8
6. Meat	..	..	..	..	12 ch.	1,509·6
7. Vegetables	..	..	..	..	1 sr.	631·2
8. Salt	..	..	..	..	—	—
						<hr/> 59,763·6 <hr/>

Calories per adult worker per day .. 3,448

(iv) A working-class family of lower middle grade. Income Rs. 18 per mensem. The family consists of the worker, his wife and two children aged seven and one and a-half.

Consumption per week.					Quantity.	Calories.
1. Wheat flour	..	..	..	..	7 srs.	17,389·4
2. Rice	..	..	..	..	3½ srs.	11,664·8
3. Arhar dal	..	..	..	..	1 sr. 14 ch.	3,815·0
4. Meat	..	..	..	..	6 ch.	754·8
5. Vegetables	..	..	..	..	6 ch.	237·4
6. Ghee	..	..	..	..	5½ ch.	2,356·9
7. Oil	..	..	..	..	1 ch.	224·4
8. Salt	..	..	..	..	7 ch.	—
						<hr/> 36,442·7 <hr/>

Calories per adult worker per day .. 2,314

(v) A working-class family of middle grade. Income Rs. 27 per mensem. The family consists of the worker, his wife and three children aged twelve, ten and two.

Consumption per week.					Quantity.	Calories.
1. Wheat-gram-barley flour	..	..	..	..	10 srs. 8 ch.	26,222·7
2. Arhar dal	..	..	..	..	5 srs. 4 ch.	11,445·0
3. Rice	..	..	..	..	5 srs. 4 ch.	17,497·2
4. Vegetables	..	..	..	..	12 ch.	475·0
5. Meat	..	..	..	..	12 ch.	1,509·6
6. Ghee	..	..	..	..	5½ ch.	2,356·9
7. Oil	..	..	..	..	2 ch.	448·8
8. Gur	..	..	..	..	7 ch.	803·6
9. Salt	..	..	..	..	10½ ch.	—
						<hr/> 60,758·8 <hr/>

Calories per adult worker per day .. 2,993

It is striking that the Indian worker in the factory not merely requires but also obtains more calories than are needed by the Indian peasant or a professional man engaged in sedentary pursuit. Thus, the calories per adult worker of the lowest grade (2,341) are much higher than the estimate of calories needed for a professional worker or a peasant calculated on the basis of a study of the latter's basal metabolism.

On the other hand, the calories which the Indian working man's diet yields hardly reach the level at which the British working man's dietetic position ordinarily stands. The following comparison is significant.

	Basal Metabolism. Calories.	Diet.
British working man .. .. .	1,700	3,500
Indian working man .. .. .	1,200	2,400

The former has a surplus of 1,800 calories to expend on bodily movement (including his work), while the latter has 1,200 calories only. A part of this difference is accounted for by lower weight, but the difference indicates not merely less stamina and more apathy but also less strenuous work, which may be forthcoming. It has been found that the expenditure of calories increases thrice when the rate of working is doubled. Both climate and physiological adjustment have fitted the Indian factory hand to work at a slower pace, and if he has to labour unremittingly and strenuously for long hours he adjusts himself by occasional idleness as well as absenteeism. There is no doubt that work under factory conditions, both in India and in England, demands similar expenditure of energy and its recoupment. It is true that the warmth of the climate does not require heat production to offset heat loss as in the western countries, but on the whole the pressure of unremitting work in standardized production in the factories cannot be maintained for long on a diet which is physiologically inadequate. This is responsible not to a small extent not merely for industrial inefficiency, but also for greater absenteeism and prevalence of disease and mortality among the factory workers in our country.

## PART II.

### A case for Social Insurance in India.

In India it has been alleged that a thorough going social insurance scheme is just now impracticable. The alleged reasons are: (a) there is no unemployment among the labouring classes. The following analysis of statistics about agricultural labour is trotted out in support of the hypothesis.

Provinces.	Farm servants and field labourers.		Persons living on income from rent and cultivating tenants.	
	1911.	1921.	1911.	1921.
Punjab .. .. .	1,192,000	1,134,000	626,000	1,008,000
United Provinces .. .. .	4,552,043	4,035,887	28,712,015	29,843,168
Bengal .. .. .	3,660,000	1,805,502	29,748,666	30,543,557

Other provinces betray the same decrease in the number of farm servants and agricultural labourers and the same increase in the number of farmers and rent-receivers. In England and Wales there are more than three hired labourers to each farmer or cultivator, whereas the proportion of hired labourers to farmers and rent-receivers in India is only one to six. The number of people supported by the preparation and supply of material substances showed a decrease of 4.3, industry 6, transport 13.8 while trade only showed an increase of 2 per cent. In industries, textiles fell down by 5.4, wood 4.9, metals 3.1, ceramics 1.1, chemical industries 3.8, food industries 16.4, furniture 31, building 14.9, transport, etc., 6.7, undefined industries 4.2, while the production and transmutation of physical forces showed an increase of 72.9, hides and skins, 1.8. In other words, there was a deficiency of nearly 20 per cent. in all. Therefore Sir C. Innes pointed out that in India, in agricultural as well as in other manufacturing industries, the employer runs after the employee, whereas in England and Wales, the employee seeks employment. The conclusion is that there is no unemployment here and therefore no case for unemployment insurance can be made out.



(b) The second reason advanced against the practicability of any scheme of social insurance is the lack of any insurance tradition here. In England, though social insurance is comparatively young, it practically started from 1911, still mutual benefit friendly societies and trade unions had been discharging similar functions for a long time. In Germany the scheme dates from the eighties of the last century. Moreover the insurance habit is not popular here as the following figures collected by the agent of the Oriental Insurance Company in Lucknow will show :—

Name of country.	Life insured per head of population.		
	Rs.	a.	p.
America .. .. .	2,000	0	0
Canada .. .. .	1,300	0	0
New Zealand .. .. .	900	0	0
Great Britain .. .. .	600	0	0
Norway .. .. .	450	0	0
Sweden .. .. .	420	0	0
Netherlands .. .. .	390	0	0
Denmark .. .. .	330	0	0
India .. .. .	1	8	0

There are only 66 Insurance Companies in India with a paid up capital of 3·1 crores of rupees. In the face of this, it is idle to assert, the critics say, that the people will take to insurance quickly.

(c) The third reason is more or less actuarial. As has been ably pointed out by Professor K. B. Madhav " the conditions precedent are not satisfied in this country—viz., (1) that there must be a risk of general loss. (2) That the probability of the occurrence of this casualty must be capable of being calculated with some approximation of certainty and (3) that the cost of provision must not be prohibitive." In other words, there are no statistics for Indian Insurance Companies to go upon and much less for the Government.

(d) The fourth reason is that the cost is enormous, and the India Government, already saddled with the extremely necessary army expenditure, cannot undertake to spend millions on behalf of the labourers, even as subsidy to the employers, especially when the important group of capitalists in the textile industry are just now facing a crisis. The 24 millions of pounds spent by the state for benefits in the health insurance and 13 millions for unemployment insurance in 1925, that is 37 millions of pounds in all, in a country like Great Britain are already a sore point with the opposition. Besides, the India Government is already committed to two forms of social insurance, viz., the Workmen's Compensation Act and the Mines Board of Health.

Now some of the reasons advanced against any policy of State insurance are valid, others are not. For example, the case that there is no unemployment in India among agricultural and industrial population is vitiated by an ignorance of the real conditions of peasants in India. The large increase in the number of dependents upon agriculture is due mostly to the rise of rent-receiving non-cultivating class, chiefly recruited from people who had drifted from the village to the city and accumulated money there and want to come back as landlords. They speculate on rural holdings, however small, uneconomical, fragmentary and mortgaged they might be. Then again the cultivating tenant may be a temporary owner who cannot eke out a living wage. Anyhow, if the function of a social insurance scheme is to prevent poverty, it is small consolation to know that so many Indian people are peasant proprietors. All that we are concerned with is the poverty among agricultural labourers and their living below the subsistence level, which is undoubted. We must remember that an Indian agriculturist has an average holding varying from 3 acres in Assam, Bengal, Bihar and Orissa to 12 acres in Bombay, which work out on the average 2·5 acres for 106·5 millions of workers. A chronic disease is not dramatic and blunts the sense of acute pain. In any case, the effects of chronic unemployment are there. Indian labourers as a whole are poor. Indian poverty as has been alleged, is not a question of mal-distribution of wealth as in some countries of Europe, especially Great Britain. Mr. Jack's calculation for a village in Bengal is Rs. 50 per head per annum and Dr. Mann's calculation for a Poona village is Rs. 44. According to Mr. Jack there is some pretension of an equitable distribution in a typical Bengal village. " Nearly 77 per cent. of the total population there are agricultural families, among whom 49·5 per cent. live in comfort with an annual income of Rs. 365 ; 28·5 per cent. are below comfort on Rs. 233, 18 per cent. above want on Rs. 166 and 4 per cent. in

indigence on Rs. 115." The per capita income for the different classes is Rs. 60, 43, 33, and 27 respectively as contrasted with the model expenditure of Rs. 50 and Rs. 20 for the first and the last classes. Among the non-agricultural classes, the distribution of wealth is not so fair. Dr. Mann offers equally hopeless prospects for the Bombay peasants. "The average family income was Rs. 166-6 annas but the cost of living was Rs. 218-8 annas. He mentions that 85 per cent. of the families are insolvent having an income equal to 57-5 per cent. of the sum required for decent living, i.e., Rs. 44 per head per annum. Dr. Lucas' study of Kaviarpur in the Punjab betrays an annual deficit of Rs. 9-8 annas. In his opinion 20 to 30 per cent. of the people living in villages are living in poverty. Over and above that there is indebtedness. So if we exclude the rent-receiving non-cultivating but land-owning classes and consider the legal difficulties which stand in the way of consolidation of holdings, we might be justified in saying that there is unemployment among the agricultural labourers, specially during the off-season lasting from 4 to 5 months when the decadent and moribund cottage industries cannot fully engage their attention. The emigration of labour from Bihar and the United Provinces to practically all over India is a striking proof of the fact that there is employment among land-labourers. Among unskilled industrial labourers, who are in the majority, there is temporary unemployment in congested areas. Only the Bombay figures are available and even they are not authoritative.

The conclusions are that (1) there is no shortage of labour supply in Bombay textile and engineering industries. But adequacy in the supply of labour is a vague term. It might mean that the supply of labour is just equal to the demand or it might mean that there is always available a large source of supply which can be utilized by the employer. The report of the returns is not clear on this point. But when Karachi Port Trust reports that the supply of skilled and unskilled labour was plenty, there is room for suspicion that the word adequate does not mean an equilibrium reached after a severe strain from wheeling the labourer away from their holdings in the villages. (2) The absenteeism figure caused by sickness, call of the harvest, festivities and Monday feeling is not high. It can be fixed at 10 per cent. on the average, with the exception of Ahmedabad. In any case, it all depends on the locality of the industrial area, whether people come from the neighbouring villages or from distant parts, whether there are slums breeding diseases or not, whether the labourers are recruited from the landless proletariat or not. So the absence of unemployment figures do not denote full employment and cannot be advanced as a sound reason for not starting a compulsory unemployment insurance scheme at all in any shape.

We recognize the difficulty of the absence of accurate figures. So we cannot advocate any unemployment insurance scheme before we can secure statistics of the unemployed. In the mean time we can lay emphasis on the other aspects of social insurance, namely health insurance. In Great Britain, these two go together and whoever is insured against unemployment is also insured against sickness and disability. In India in 1924, 50 lakhs of people died of fever, which is an easily preventible disease, and cholera, small-pox, and plague were responsible for 3 lakhs, 1 lakh falling to the share of each. It is well known that the latter diseases are preventible, though more elaborate, hence more costly sanitary measures are necessary. Mr. G. Bransby Williams, the Chief Irrigation Engineer, says, "It is often repeated, and indeed the fact is patent that India is a poor country as compared to England and America. It is argued from this fact that she cannot afford to undertake expensive works for the improvement of public health. But in reply to this, it may be asked how far is India poor because of being unhealthy."

As regards the second charge, viz., the lack of insurance tradition in India, it can be submitted (1) that, there is even now a network of village Panchayats and caste-guilds, functioning in India. The Famine Commission codes and reports always instruct their inspectors and superintendents to utilize them. The joint family, though fast breaking up under economic and legal pressures exerted by western influence, still retains its hold in so far as the law of co-parcenary property is regnant and imposes upon the Karta of the family the obligation of supporting the aged, the orphan, the widow, and the indigent. The Moslem law and practice is equally solicitous for them. There are other fraternal associations, "Kuris" and Chit funds. So the Indian labourer is not a stranger to the idea of mutual benefit, though, he might be to the exact procedure of premium and benefit scheme involved in insurance.

(2.) That, the Government in Indian Trade Unions Act of 1026, Chapter III, Section 15 (g) while notifying the objects on which a registered trade union may

spend out of its general funds, mentions "the issue of, or the undertaking of liability under policies of assurance on the lives of members or under policies, insuring members against sickness, accident, or unemployment," as one of the legitimate items of trade union expenditure; (3.) That the first Insurance Company was established in Japan in 1880, and it was only in 1900 that the Insurance Bureau of the Department of Agriculture and Commerce was started. Mr. Cook, of the "Statesman" writes, "Industrial Insurance is conducted in that country as a Government monopoly and premiums are conducted monthly through the post offices, throughout the Empire at an expense ratio which for 1925 was so low as 17 per cent., very much below the working cost of any industrial company transacting business in Great Britain. At the end of last year there were 9½ million policies in force, insuring sums in excess of 1,200 million yen. This scheme of state insurance was only introduced in 1916, after having been under consideration for 17 years previously. Policies are issued under both whole life and endowment schemes for sums ranging between 20 to 350 yen and between the age of limit of 12 and 60 at the time of entry. There is no medical examination and certain reductions are made in the case of endowments if death occurs in the case of 2 years and is not caused by infectious disease. For contracts extending over five years a certain percentage of the premiums paid is refunded on expiration of the contract term. The post office authorities are granted nine per mille of the insured amount as initial expense and 12 per mille on account of canvassing and the fund derived from the premiums collected is invested by the Government in works of public utility. The scheme has become so popular that in some provinces from 50 to 70 per cent. of the population have insured themselves." Therefore it is not impracticable to frame insurance schemes for workmen in India, for Indian labour and Japanese labour conditions are more or less on a par. In 1925, insurance provision for working classes in England was double that for 1913, and in the U.S.A. and Canada, 3 times the amount of 1916.

The third objection is valid to some extent, not only in so far as any State help is concerned, but also with reference to private companies, insuring individuals on an industrial basis. But we must admit that the risks of health, i.e., sickness and death at least, if not of unemployment, cannot be prevented or hastened. We have the authority of Mr. Lethbridge, the Labour Commissioner of Bengal, to support our view. He says that there has not been a single case of malingering in so far as the operation of the Workmen's Compensation Act is concerned. We have to admit that with 8 to 10 per cent. of the labourers as absentees in Bombay and let us say the same percentage on the sick list in a factory on the average, the "contemplated failure of premiums is concerned with a relatively small number during any short interval" as Prof. Madhava thinks. Vital statistics in India are proverbially inaccurate. The Labour Gazette of Bombay, November, 1924, defends the Government of India on the ground that in Great Britain figures for occupational mortality were published ten years after the events referred to. It says, "It may be remarked that in India we have not yet secured any figures of comparative mortality in different occupations. For one thing, our census record of occupations does not yet distinguish between employers and employed, so that the numbers returned after the various 'Groups' in Sub-Group III 'Industry,' order 9 'Metals' includes masters as well as operatives. And for another, our village Death-Registers do not record occupations. There is little doubt that at the next census strenuous efforts will be made to secure a better classification of occupations."

Dr. Bentley thinks that the percentage of error is somewhat near 27 on the recorded rates. The death-rate for India in 1922 was 24·02 per mille, a figure too low by 6. We can accept 30 per mille as the average death-rate in any healthy year in India as compared to 12 in Great Britain. The figures for sickness are more unreliable, but malaria, dysentery, cholera, enteric, diarrhoea are between themselves, responsible for much more than half the death-rate and 8 to 10 per cent. of absenteeism at most. Besides there is hook worm, which affects the efficiency and vitality of the poor people in cities and villages. Now the death-rate of India can, in the opinion of Mr. Bransby Williams, be reduced to 15 per mille, i.e., 3,750,000 lives can be saved annually. In England, there are 180 weeks of sickness per death; in the absence of detailed information, let us accept the same figure for India. So we diminish 675 millions of sick weeks in one year for the entire population. For a labouring population of 160,000, on the basis of 10 per cent. it would be 83 lakhs of weeks. The figures represent preventible sickness. Accepting Col. Hutchinson's estimate of Rs. 200 as the average assessment of each life and at the minimum Rs. 2 for each week's loss, the actual loss would mean 210 crores or the capitalized value being ₹2,000

millions at 7½ per cent. for the whole country.\* The labourers lose 1 crore 7 lakhs or nearly 20 crores of capitalized value. Two hundred and ten crores mean slightly above Rs. 8 per head of the population. The Bengal Government spends only Rs. 2 per head outside Calcutta for Public Health and District Boards spend ½ of an anna per head for sanitation. Now that a national health insurance can relieve that enormous loss of life and efficiency is beyond question. Of course, the work of the Public Health Department will not be obviated, it will only be reinforced by the interest shown towards its aims and ideals by the insurance companies and the entire class of employers and employees. On the same estimates of death-rate, sickness-rate, and average life, the responsibility for 16 lakhs of workers in factories, mines, and other industries will be more than two crores of rupees. If the responsibility for, removing sickness and death only is shared equally between the labourers, employers and the State, it is less than 1 crore for each party, i.e., for each labourer Rs. 6 only per annum, which is not a great amount for the labourer, whose interests are most jeopardized in insanitary conditions. It is not difficult to fully arouse the conscience of the capitalist to undertake this responsibility by contributing to the payment of sickness benefit and some kind of burial benefit. Prof. Madhava has calculated that "with a burial benefit of Rs. 5, weekly sickness benefit of only 8 annas together with allowances at the same rate for only 13 millions labourers aged 60 and over, the total cost is 70 crores, not much greater than the military expenditure in India (67½ crores)." We know in India, as elsewhere, sickness varies according to occupation, age, and sex. In America, 20 per cent. of a normal group will suffer a disabling sickness for more than a week, 65 per cent. of the sick are disabled for about 4 weeks, 20 per cent. 4 to 8 weeks, 60 per cent. 8 to 12 weeks, 3 per cent. 6 months, and 1·3 per cent. for more than a year. Therefore, as such, Indian statistics are in default we cannot just now offer an actuarial basis for a thorough-going scheme of health insurance. But what can be achieved is shown by the preceding figures of absenteeism and the following figures of death-rate, and the average constantly sick-rate among Indian troops. In 1923, out of a total number of nearly 150,000, 466·7 per mille were admitted into hospitals, out of whom 5·98 or 6 per mille died, 16·3 per mille were invalids, and 20·13 per mille were constantly on the sick-list (as against 80 to 100 per mille in the mills). This year was a particularly healthy year for Indian troops but the previous pre-war years were not. Their average for 1910-1914 were 544·6, 4·39, 5·4, and 20·7 respectively. If the marked improvement of figures for 1923 over the average of 1914-1918 is traceable mainly to the introduction of station hospital system in 1918, then it can be well imagined how a health insurance scheme will improve the health of the labourers in India. Let us face facts and know once for all that in spite of Mr. Williams's warning, that the cost of death and sickness, arising out of preventable diseases, in India, runs to 2,000 millions sterling, the India Government, since the public health and industries departments have been provincialized transferred subjects, will not entertain any such proposal of compulsory health insurance, unless the employers take the initiative.

But insurance by industries, is open to many objections. It is extremely difficult to fix the responsibility for the unemployed, and the sick on any industry, like engineering, which is horizontally organized. In case an insured person removes from one industry to another, a separate establishment will have to be kept to consider the claims of such a person. Besides, when an industry is small, the calculation of risks is not sound and dependable and no big insurance company will enter into business with it, and therefore the premiums will be heavy. Each industry will again have to appoint employment exchanges, health officers, and a host of other officials. It will impede mobility of labour to a great extent. What is worse is that well-paid labourers in big industries will escape with low contributions and ill-paid labourers in smaller industries will have to pay more. The most glaring inequity however is that some industries are more susceptible to unemployment and ill-health than others. The causes of unemployment and ill-health again are sometimes super-industrial, sometimes, unemployment in one industry is due to the temporary prosperity of another. Therefore all the vices attached to a policy of drift and non-co-ordination are to be found in a puristic scheme of insurance by industry. The number of organized, well-financed and well-supplied industries in India is small. Those which are, cannot bear the full burden of Industrial Insurance. Nascent industries will certainly pass on the entire contribution to the community as increased prices. Only the important industries with high dividends alone can think of the partial contribution. Therefore a scheme in which labourers in a group, the capitalists of the same industry, and the State through subsidy, when need arises, can co-operate, is alone feasible. This is known as Group-Insurance, a comparatively late development of Social Insurance.

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\* As reported in the Statesman, October 28, 1925.

"In this form of insurance, a group of employees can be insured under a blanket policy." The premium of the group, the unit of which may be taken to be the family, or members of the village Panch or the same caste working in the cities or villages, is certainly less than the sum total of individual premiums for the responsibility is joint and several. It is paid in one lump. There is no medical examination, just as much as very many insurance companies forego it in the case of joint or partnership insurance. The doctor's fees coming to Rs. 16 for every 2,000 Rs. or Rs. 10 for every Rs. 1,000 are saved thereby. The employer takes the policy for his group of employees, whose general conditions of health and employment are reported upon, en masse, by insurance agents. "The contract is generally one-year-renewable type, though it may extend to five or ten years. A certain percentage or multiple of the wages of the sick-employee will be paid as benefit if the employee is still in employ. Benefit certificates lapse when workmen leave service permanently, and death benefits will increase proportionately with the years." The rates of premium are lower for the saving in the medical service fees, commission rates, collection charges and lapse levies and for the security of payment which the capitalists may make every quarter to the companies in lump sum. The inspection charges can be kept low by collaboration with the factory inspectors.

Other advantages are (1) a continuity of service and a healthy co-operative spirit between the employer and the employee which will solve the industrial unrest, especially the problem of strikes without notice, (2) a camaraderie between labourers grouped under one blanket "policy"—a very partial solution of the Hindu-Moslem dispute in industrial areas, (3) a habit of thrift among a proverbially unthrifty people. The chief advantage of group-insurance over industrial insurance on an individual basis is that the former is cheaper. In India, the block agency system may be adopted which according to the latest report of one company in England has succeeded in cutting down expenses from 40 per cent. of the premiums to 25 per cent. within six years; and in America, one large company has reduced the expense ratio to premium income from 44 per cent. in 1900 to 26½ per cent. in 1925. Needless to add that group insurance will be cheaper than family endowment policies advocated by Miss Rathbone or the Widows' Pension and Old Age Pensions of Great Britain.

Now one company in India, the Oriental Life Assurance Co., of Bombay has got the following rate. A whole life policy for Rs. 1,000 without profit, starting from the 20th year, would mean Rs. 21-10 annas annually. For a group policy, the annual premiums can be 10 per cent. less, i.e., say Rs. 19-10 annas which would mean Re. 1 11 annas per month. This sum can be proportionately divided between the employee, the employer and State. Let us see what happens in Great Britain, "Men pay 5d. per week, women 4d. employer 5d. (he has got to pay more for another scheme of pension benefits) and the State two-ninths of the total sum required. From January, 1926, the contribution for men by themselves and the employer has been reduced from 10d. to 9d. and for women from 9d. to 8½d., sickness benefits are 15s. for men and 12s. for women for 26 weeks, disablement benefit of 7s. 6d. for the whole period, maternity benefit if the wife is not insured £2 and if insured £4. Doctor's advice, medical provisions and even Sanatorium treatment are sometimes provided." In other words, in Great Britain, the shares of employers and employees are equal and the State has got to come to the rescue. In India, it will come to 9 annas for each party per month which would mean 1 anna for each group of 9.

Therefore what is needed in the present conditions of Indian labour is a group insurance scheme which is primarily an affair of the labourers and their employers and ultimately one of the State. The scheme is social, but not State insurance or industrial insurance.

This group assurance satisfies the five tests that have been put forward by Mr. Cohen for any successful scheme of social insurance. In this form (1) the payment by the employer is prompt; (2) the administrative costs are lower. In England, societies "Health Insurance, which is administered under Government supervision by approved societies (i.e., trade unions, friendly societies, and private insurance companies), have an administrative cost of 14 per cent."; (3) there is a greater chance for poverty among our labourers being reduced, especially poverty arising out of sickness; (4) in so far as the funds (from which workmen are to receive benefits), are raised by contributions from the employees assisted by the employers and the State (in America, the idea is that the employers would insure their employees in group), collected by the employers and paid in lump sum as premium, they are safe; (5) there is no fear of lapsed policy either from the non-payment of premiums, or from the death of the insured individual. The fear of accumulation does not arise here, for the accumulated sum will be divided.

I am not blind to the difficulties of group-insurance. Mainly they are actuarial. But, Mr. Surendara Nath Tagore, the General Secretary of the Hindusthan Co-operative Insurance Society thinks that they are not insuperable. "The shortness of the lives of labourers, absence of statistics about the average longevity, their

distribution over wide areas, the procuring of proposals, the medical examination en masse, the investigation and settlement of claims are expensive items." The labourer in India individually has no surplus, but if the rate of contribution is deducted from the wages by the employer beforehand, then the difficulty may be easily overcome. But how to construct premium tables for them? Mr. Tagore writes, "The premium tables actually in use by life offices for their Indian business are far from accurate, based as they are on rule of thumb adaptations of British or American experience unchecked by any reliable statistics. How then is such Indian business at all workable? Because of the margins of safety that are kept and which result in the periodical surpluses returned as bonuses to the policy holders or absorbed as profits by the shareholders or proprietors of the life company itself. If, in the case of the lower strata of our society, a large margin be taken to start with and the resulting surpluses returned at short intervals (in our scheme, a part to be spent for medical benefit, etc.) to the assured persons under some equitable scheme, neither will the life office be endangered nor the policy holders defrauded. With the progress of the business, first hand information will accumulate and thereupon the premium tables can be revised and the excess margin reduced to any degree."

Medical examination offers no very great difficulty. The average longevity of a group of persons in any occupation can not differ materially from the medical results of individual insurance by ordinary medical doctors. The defect might be included in the margin as well. "The expenses of procuration and claim settlement could be largely minimised" through a representative of the group. We have seen in Bombay how the village panchayat and the sanitary committees are working. Their presidents may be elected as representatives. Where they do not exist, there are many other socio-economic bodies functioning, the secretaries of co-operative societies, the local boards and the panchayat in the villages and the caste-panchayat, the sirdars and their employers who will undertake the job. "In fact the labourers' own representatives, even at a commission, will be less expensive than any form of agency and medical examination by individuals." Over and above this, if the co-operative societies, boards of public health co-operate and the state passes some kind of protective legislation by which small insured sums of labourers, say up to Rs. 1,000 may be unattached and untaxed, the problem of Indian poverty, at least so far as it relates to sickness and early death of industrial labourers followed by destitution of their families, will be solved. I suggest this idea of group-insurance to our economists and Indian insurance companies, upon both of whom the duty of alleviating the economic distress of Indian labourers lies. Mr. Tagore writes, "An insurance company making it a rule, in the case of this department, only to deal with such groups, to begin with, should have no dearth of business." Mr. Hook, whose insurance notes in the "Statesman" are undoubtedly the best that I have read in any paper edited in India, is also of opinion that group insurance has a future in this country.

I beg to state that this paper is not and cannot be a description of any thorough-going scheme. The reason is that we have no accurate statistical information to go upon. It is only an invitation to conduct enquiries, assemble relevant statistics and discuss the possibilities of what I consider to be a fruitful idea.

### PART III.

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#### *Working-class Cost of Living Index, Cawnpore.*

The general cost of living of the millhand comprises his expenditure under various heads and different articles of consumption. In a market fluctuations in prices differ with the nature, quality and variety of articles, and it is hardly possible to ascertain at a glance the general rise or fall in the prices. Thus, in order to obtain a measure of the general movement of prices of those commodities which enter into the cost of living, the method of index numbers is resorted to. A series of commodities are selected and their prices taken for a standard or basic period. In our investigation the pre-war year of 1913 has been taken as the normal year exhibiting none of the extraordinary conditions of the war period that followed. The prices for the commodities for subsequent years have been compared, these prices being expressed as percentages of the prices ruling in 1913. The comparison of the prices is confined to the years 1914, 1920, 1927 and 1929.

*Computation of the Index Numbers : Food.*—The following are the average annual retail prices current per maund in rupees of the cereals at Cawnpore for the various years noted against them :—

Year.	Rice.	Wheat.	Jowar.	Bajra.	Barley.	Gram.	Arhar dal.
1913 .. ..	5.1	3.8	2.6	2.8	2.7	2.7	3.9
1914 .. ..	5.2	4.5	3.5	3.5	3.4	3.9	5.3
1920 .. ..	9.5	6.5	4.2	5.0	4.4	5.3	9.3
1927 .. ..	7.8	5.5	4.1	4.1	4.1	4.3	7.3
1929 .. ..	7.8	5.7	4.4	4.4	4.2	5.3	7.0

The following are the variations, calculated from the above table, in the prices of cereals in different years, taking the year 1913 as base :—

Year.	Rice.	Wheat.	Jowar.	Bajra.	Barley.	Gram.	Arhar dal.
1913 .. ..	100	100	100	100	100	100	100
1914 .. ..	102	118	135	125	126	144	136
1920 .. ..	186	171	162	179	163	196	238
1927 .. ..	153	151	158	147	152	167	187
1929 .. ..	153	150	169	157	156	196	179

We shall now proceed to allot weights to each cereal and then compute the average. The main criterion in weighting the cereals is the actual expenditure of the workers on these cereals. The following is the abstract from some of the monthly budgets of workers showing the amount spent on cereals by labourers under different grades of income and the proportion of the amount spent on particular cereals to the total amount spent on cereals :—

Serial No.	Total monthly income of the family.	Amount spent on cereals per month.	Amount spent on wheat, gram, barley and bajra.	Percentage of the total amount spent on cereals.	Rice.	Percentage of the total amount spent on cereals.	Other cereals, pulses.	Percentage of the total amount spent on cereals.
	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.		Rs. a. p.	
1	41 3 6	23 7 3	16 15 3	70	3 0 0	13	3 0 0	13
2	41 10 3	11 12 0	5 8 0	48	3 12 0	32	2 8 0	20
3	39 9 3	18 0 0	12 0 0	66	3 0 0	17	3 0 0	17
4	37 0 0	11 13 0	8 0 0	64	2 12 0	24	1 1 0	12
5	32 0 0	4 3 3	2 12 6	51	1 0 0	23	1 0 9	26
6	30 0 0	9 11 0	5 11 0	56	1 0 0	10	3 0 0	34
7	24 12 6	8 8 0	5 12 0	68	1 0 0	12	1 12 0	20
8	15 10 0	7 1 0	5 0 0	71	2 0 0	28	0 1 0	1
9	15 0 0	11 10 9	7 8 0	66	3 0 0	26	1 2 9	8
10	13 3, 6	7 0 0	4 0 0	57	1 4 0	14	1 12 0	29
			Average 62 %		Average 21 %		Average 26 %	

Thus we find that about 62 per cent. of the total expenditure on cereals is on wheat, gram, barley and bajra, about 21 per cent. on rice, and about 26 per cent. on other cereals consisting mainly of pulses. In allotting weights six points are allotted to wheat, two points to rice, and the remaining two points to other cereals or pulses.

As to the five cereals grouped in one—wheat, barley, gram, bajra and jowar—a detailed survey was undertaken relating to the respective quantities of food grains consumed by the mill population. The investigation shows that the last four cereals are not used for the sake of economy, as gram is now actually dearer than even

wheat, but gram adds greatly to variety in the diet. Bajra finds its use only during the two months of winter—December and January. Generally, it is not mixed with wheat flour but breads of pure bajra flour are made and taken with sugar or gur. Very poor labourers mix barley and jowar with wheat for reasons of cheapness, but the proportion of barley or jowar does not exceed 25 per cent. of wheat flour. To sum up, wheat commands the greatest importance, and any rise, be it slight, affects the labourers considerably. Out of six points allotted to this group, we allot 5·5 points to wheat and ·5 to the remainder of the cereals.

Now computing the average for the cereals, keeping in regard the weights allotted, we get the following results :—

Year.	Cereals.	Index No.	Weights.	Product of Index No. and weight.
1914	Rice .. ..	102	2	204
	Wheat .. ..	118	5·5	649
	Jowar .. ..	135	·125	17
	Bajra .. ..	125	·125	16
	Barley .. ..	126	·125	16
	Gram .. ..	144	·125	18
	Pulses—			
	Arhar dal .. ..	136	2	272
				1,192 ÷ 10 = 119
1920	Rice .. ..	186	2	372
	Wheat .. ..	171	5·5	941
	Jowar .. ..	162	·125	20
	Bajra .. ..	179	·125	22
	Barley .. ..	163	·125	20
	Gram .. ..	196	·125	25
	Pulses—			
	Arhar dal .. ..	238	2	476
				1,876 ÷ 10 = 188
1927	Rice .. ..	153	2	306
	Wheat .. ..	151	5·5	831
	Jowar .. ..	158	·125	20
	Bajra .. ..	147	·125	18
	Barley .. ..	152	·125	19
	Gram .. ..	167	·125	21
	Pulses—			
	Arhar dal .. ..	187	2	374
				1,589 ÷ 10 = 159
1929	Rice .. ..	153	2	306
	Wheat .. ..	150	5·5	825
	Jowar .. ..	169	·125	21
	Bajra .. ..	157	·125	20
	Barley .. ..	156	·125	20
	Gram .. ..	196	·125	25
	Pulses—			
	Arhar dal .. ..	179	2	358
				1,575 ÷ 10 = 158

We now pass on to the consideration of the second head under food, i.e., other foodstuffs. This head covers expenditure on linseed oil, milk, ghee, salt, sugar, gur, tea, etc. A similar weighting process has been adopted here as well.



The following table shows the prices of other foodstuffs, in rupees, ruling at Cawnpore in various years under review :—

Year.	Ghee, per maund.	Linseed, per cwt.	Raw sugar per 500 lb.	Imported sugar refined, per cwt.	Salt, per maund.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1913 .. ..	49 10 0	8 10 0	21 8 0	9 3 0	1 13 0
1914 .. ..	41 13 0	8 2 0	21 0 0	8 10 0	1 13 0
1920 .. ..	85 3 0	18 0 0	60 0 0	37 4 0	3 2 0
1927 .. ..	64 0 0	10 4 0	60 0 0	13 0 0	2 8 0
1929 .. ..	60 0 0	11 4 0	55 0 0	13 10 0	2 13 0

The following table shows the index number of the above prices, the year 1913 being the base year :—

Year.	Ghee.	Linseed.	Raw sugar.	Refined sugar.	Salt.
1913	100	100	100	100	100
1914	84	94	103	94	100
1920	172	209	278	410	172
1927	129	118	278	142	139
1929	121	130	256	148	156

In the above table we have omitted the prices for milk and tea. The reason for such omission is that these articles are consumed by the labourers in small quantities only casually, and we cannot have reliable records of their consumption.

As to giving weights to these articles we have allotted 3·5 points to salt, for it is an essential requirement for physical maintenance, and the demand for it is not elastic, though we cannot rightly call it to be of perfectly inelastic demand. Linseed has been allotted 2·5 points, for labourers use it in place of ghee for cooking purposes. Raw sugar has been given the third place with two points for it finds a general use among the labourers. Last come refined sugar and ghee with one point each.

The table below shows the weighted average for other foodstuffs, according to the weights allotted :—

Year.	Articles.	Index No.	Weights.	Products of Index No. and weight.
1914	Linseed .. ..	94	2·5	235
	Raw sugar .. ..	103	2	206
	Sugar, refined .. ..	94	1	94
	Salt .. ..	100	3·5	350
	Ghee .. ..	84	1	84
				969 ÷ 10
				Index No. = 97
1920	Linseed .. ..	209	2·5	523
	Raw sugar .. ..	278	2	556
	Sugar, refined .. ..	410	1	410
	Salt .. ..	172	3·5	602
	Ghee .. ..	172	1	172
				2,263 ÷ 10
				Index No. = 226

Table—contd.

Year.	Articles.	Index No.	Weights.	Product of Index Nos. and weights.
1927	Linseed .. ..	118	2.5	295
	Raw sugar .. ..	278	2	556
	Sugar, refined .. ..	142	1	142
	Salt .. ..	139	3.5	486
	Ghee .. ..	129	1	129
			Index No.	$\frac{1,608}{10} = 161$
1929	Linseed .. ..	130	2.5	325
	Raw sugar .. ..	256	2	512
	Sugar, refined .. ..	148	1	148
	Salt .. ..	156	3.5	546
	Ghee .. ..	121	1	121
			Index No.	$\frac{1,652}{10} = 165$

*Light and fuel.*—For the purpose of lighting the workers generally use kerosine oil. Some of them use mustard oil as well, but kerosine finds general use owing to its cheapness. As for fuel, coal is not found in use anywhere. Dry cowdung and firewood are the chief things used as fuel. Dry cowdung is used to light the fire, but the wood is used in larger proportion.

The prices for kerosine and mustard oils are given below :—

Year.	Article.	Price per case of 2 tins.	Per maund.	Index No.
		Rs. a. p.	Rs. a. p.	
1913	Kerosine oil " Chester "	4 12 0	—	100 K
	Mustard or rape seed oil	—	17 10 0	100 M
1914	Kerosine oil .. ..	5 0 0	—	105 K
	Mustard oil .. ..	—	17 10 0	100 M
1920	Kerosine oil .. ..	10 12 0	—	227 K
	Mustard oil .. ..	—	28 8 0	161 M
1927	Kerosine oil " Chester "	9 12 0	—	206 K
	Mustard or rape seed oil	—	21 15 0	124 M
1929	Kerosine oil " Chester "	7 8 0	—	158 K
	Mustard or rape seed oil	—	22 8 0	127 M

The cost of fuel has also gone up. No accurate figures for the various years are available, but oral enquiry shows that babulwood (generally used as fuel) was sold at the rate of 20 panseries (2½ maunds) for a rupee in pre-war days. The post-war rate for the same kind of wood is 10 panseries (1½ maunds) for a rupee. Thus we find the rate doubled and hence the Index No. for the post-war period has been taken to be 200.

As for the allotment of weights 7 points are allotted to fuel, 2 to kerosine oil and 1 to mustard or rape seed oil. The workers spend more on fuel, it being a necessity for cooking the food, and little on kerosine or mustard oil. Thus we arrive at the following index numbers for this head :—

Year.	Articles.	Index No.	Weights.	Products of Index Nos. and weights.
1914	Kerosine oil . . . . .	105	2	210
	Mustard oil .. ..	100	1	100
	Fuel .. ..	100	7	700
			Average	$1,010 \div 10 = 101$
1920	Kerosine oil .. ..	227	2	454
	Mustard oil .. ..	161	1	161
	Fuel .. ..	200	7	1,400
			Average	$2,015 \div 10 = 202$
1927	Kerosine oil .. ..	206	2	412
	Mustard oil .. ..	124	1	124
	Fuel .. ..	200	7	1,400
			Average	$1,936 \div 10 = 194$
1929	Kerosine oil .. ..	158	2	316
	Mustard oil .. ..	127	1	127
	Fuel .. ..	200	7	1,400
			Average	$1,843 \div 10 = 184$

Next we come to the item of house rent. Cawnpore is a congested city honey-combed with bustis and slums. The industrialization of the city has added much to its population. The mill authorities have tried to solve the problem of housing for their workers, and with this end in view some settlements have been constructed for housing the workers. But these settlements do not afford accommodation for all the workers, and hence the majority of them reside in the cities. In dealing with the rise or fall in rent, I shall deal with it under two heads—the rent in settlements and in the city.

Regular records of the rent paid by the workers to the mill authorities are maintained, and a comparison of the figures in different periods is possible. Rents in settlements differ with the nature and quality of quarters offered. The amenities provided in a settlement are also taken into consideration in fixing the rent.

In Lal Imli Woollen Mills' Settlement, known as Mac-Robertganj, the rent charged for a single room quarter in 1914 was 10 annas per month. In 1920, the rent for the same quarters rose to Rs. 1-4 annas per month, and in 1927 the figures went up to Rs. 1-14 annas per month, and is continued till to-day. Thus taking the year 1913 or 1914 as the base year, the index number for rent in 1920 was 200, and in 1927 and 1929 it comes to 300. Again, in Allenganj settlement, the rent in 1913 or 1914 for a single room quarter was 8 annas per month, in 1920 it reached Rs. 1-2 annas per month, and in 1927, the rate for which is still maintained, the figure was Rs. 1-10 annas per month for the same quarter. Thus, with the same base year, the index number for 1920 comes to 225, and in 1927 and 1929 it comes to 325.

To sum up, we keep the index number for 1929 for the quarters supplied by mill authorities to be 300 approximately.

In the city the rates have gone higher. For a small room for which 8 annas per month were paid in pre-war days, the rent now charged is Rs. 2 per month. Thus we find that the index number touches 400, but as authenticated records for the rent in the city are not available, we shall take it to be the same as for the settlement quarters.

Lastly, let us consider the question of clothing. The labourers use mostly *dhotis* and shirting cloth. In pre-war days the cost of a fine pair of *dhoties* (mostly imported) 10 yards in length, was Rs. 3; this rate was raised to Rs. 7 during the war, and now it has come down to about Rs. 4.

The same is true of the dhoti pairs of coarse kind. The cost of a pair of dhoti of the same length in pre-war days was Rs. 2. This went up to Rs. 4-8 annas, or Rs. 5 during the war period, and to-day it is sold for Rs. 3-4 annas to Rs. 3-8 annas per pair.

As to shirting, the "Statistical Abstract" of the Government of India issued in 1927, shows the following import prices.

Cost of cotton grey shirting (imported) per piece, measuring 34 in. in width and 37½ to 38 yds. in length :—

		Rs.	a.	p.	Index No.
January 1913	..	6	7	0	100
" 1914	..	6	2	0	95
" 1915	..	5	14	0	
" 1916	..	6	2	0	
" 1917	..	7	10	0	
" 1918	..	9	10	0	
" 1919	..	10	8	0	
" 1920	..	17	0	0	265
" 1921	..	17	8	0	
" 1922	..	14	6	0	
" 1923	..	13	4	0	
" 1924	..	15	8	0	
" 1925	..	14	5	0	
" 1926	..	11	14	0	
" 1927	..	9	4	0	144
" 1928	..				
" 1929	..	9	8	0	148

Thus the index numbers for cloth are as follows :—

Article.	Index Numbers.				
	1913.	1914.	1920.	1927.	1929.
Fine Dhoti, pair ..	100	100	233	133	133
Coarse Dhoti, pair ..	100	100	225/250	162/175	162/175
Shirting .. ..	100	95	237	168	168
			265	144	148
	300 ÷ 3 = 100	295 ÷ 3 = 98	735 ÷ 3 = 245	445 ÷ 3 = 148	449 ÷ 3 = 149

Lastly, in order to compute the general cost of living index figure, we find the index numbers for the various heads for various years as follows :—

Heads.	Index Numbers.				
	1913.	1914.	1920.	1927.	1929.
Cereals .. ..	100	119	188	159	158
Other grains ..	100	97	226	161	165
Light and fuel ..	100	101	202	194	184
Rent .. ..	100	100	200	300	300
Clothing .. ..	100	98	245	148	149

As to giving proper weights to these items, we shall allot 6 points to cereals, 2 to clothing, 1 to rent and .5 each to other grains, and fuel and lighting. After giving effect to these weights, we find the general index number for different years as follows :—

Year.	Heads.	Index No.	Weights.	Product of Index number and Weights.
1914	Cereals .. ..	119	6	714
	Other grains .. ..	97	.5	49
	Light and fuel .. ..	101	.5	51
	Rent .. ..	100	1	100
	Clothing .. ..	98	2	196
	Weighted Index No.			$1,110 \div 10 = 111$
1920	Cereals .. ..	188	6	1,128
	Other grains .. ..	226	.5	113
	Light and fuel .. ..	202	.5	101
	Rent .. ..	225	1	225
	Clothing .. ..	245	2	490
	Weighted Index No.			$2,057 \div 10 = 206$
1927	Cereals .. ..	159	6	954
	Other grains .. ..	161	.5	81
	Light and fuel .. ..	194	.5	97
	Rent .. ..	325	1	325
	Clothing .. ..	148	2	296
	Weighted Index No.			$1,753 \div 10 = 175$
1929	Cereals .. ..	158	6	948
	Other grains .. ..	165	.5	83
	Light and fuel .. ..	184	.5	92
	Rent .. ..	325	1	325
	Clothing .. ..	149	2	298
	Weighted Index No.			$1,746 \div 10 = 175$

#### THE CAWNPORE IMPROVEMENT TRUST.

N.B.—This statement deals only with the question of H using of Workers in Cawnpore.

An improvement Trust Committee was form in January, 1909, and this Committee was given a grant of 2½ lacs for the purpose of construction of Meston road. The Improvement Trust Committee was an auxiliary body to the Municipal Board and the expenditure of its funds was governed by a Trust Deed which was executed by it in favour of Government.

The Town Improvement Committee existed until 1919 when the present Improve-Trust was formed in pursuance to the Town Improvement Trust Act of 1919. Meanwhile, the Government had appointed in 1913, a Committee known as the Cawnpore Expansion Committee with Sir Henry Ledgard as its President and Mr. Tyler as one of its members; the report of this Committee was signed in November, 1917. In accordance with the recommendations of this Committee a Town Planner, Mr. Lanchester, was engaged, and he arrived in Cawnpore in the cold weather of 1918. After consultation with him the report of the Town Expansion Committee was further considered by a new Committee of which Mr. Stiffe was Chairman. The modifications

made were small and the Trust, when it was started in December, 1919, with Mr. Stiffe as Chairman, had ready for it, not only the wide programme of the Ledgard Committee but a number of detailed schemes prepared by Mr. Lanchester.

The Ledgard Committee's programme covered a period of 50 years and an expenditure of 188 lacs. The programme contemplated three distinct stages in the work of the Trust. The first stage was to be the stage of preliminary developments comprising acquisition of land, preparation of detailed plans and estimates, and such developments as would be necessary to make the first lot of sites in each of the centres in different areas ready for building operations. During the second stage, which was to be the longest, the process of development was to go on gradually to meet the demand for sites. During this period, main roads and drains, etc., were to be extended as they were required to serve the gradual development of fresh sites. During the third or the last stage, it was anticipated that the work of development would have been completed and consequently expenditure would be small while income would continue to accrue. Towards the end of this last stage it was believed the Trust activities would be confined to the winding up of its affairs.

The whole idea of the Town Expansion Committee appears to have been to provide facilities for expansion and not to deal with the congestion which admittedly prevailed in the city. The Committee realized that conditions in the city were extremely bad, but as their name indicated, they seemed to be concerned only with the question of expansion or extension of the city. The Trust appears to have followed from the beginning a policy in consonance with the recommendations of the Town Expansion Committee. Soon after the formation of the Trust which by Statute consists of 7 members including the Chairman of the Trust, the Chairman of the Municipal Board, and the Collector, who are ex-officio trustees, 14 external expansion schemes were notified ; some of these were subsequently dropped. The working of the Trust has resulted in the acquisition and development of land on the west and south-west of the city, but it cannot be claimed that this has resulted in relieving, to any great extent, the congestion in the city or of improving the conditions under which workmen live in the *hatas*.

*Extent of congestion in the city.*—It has been stated that the city of Cawnpore is the most congested in the province. The population per square mile in Cawnpore is 22,000 as compared with 1,300 in Lucknow. The Collector in Cawnpore stated in 1908 that "almost the whole population lives within an area of about 1 square mile and that overcrowding is excessive." "26 families (74 people) live in one two-storied house of 3,500 sq. ft. plinth area. This house contains a drinking well and 3 privies. Another house of the same size has 32 families and smaller houses with a dozen or more families are common." It is admitted that the city has grown up on no system ; unregulated. There are far too many houses and far too many people living in the houses. Thoroughfares, so narrow that a man has to turn side ways to pass through them, are common. In the dark evil-smelling lanes the passage of light and air is impeded by projecting balconies and upper storeys. The following figures relating to the year 1918, since when things, have only gone from bad to worse, will speak for themselves "the average population per acre throughout the city area is 57·8, in Butcher Khana Khurd and Coolie Bazaar it actually reaches 532 and 562."

For purposes of comparison it is of interest to note that in the same year the incidence of population per acre throughout all urban areas in the United Provinces was 21·25 and for the whole of Calcutta it was 44 ; within a circle of 18 miles from Charing Cross it was 14·8 ; within the jurisdiction of Central Criminal Court in London it was 22·7.

The total number of employees of the different regulated factories in Cawnpore is 32,274. Appendix I,\* gives the number of employees in each of the several industries in Cawnpore. Out of this number of 32,274 at least 29,000 workmen may be taken to be living in the city. Careful census has been taken to ascertain the average number of dependants of each worker and it has been found that the figure of a little over 3 represents an average family consisting of a worker and his dependants. On this basis it would appear that the labouring population living in the city would be about 90,000 strong. This number does not include the workers and their families who live in the settlements provided by certain manufacturing concerns in Cawnpore. Practically three-fourths of Cawnpore can be said to be made up of *hatas* or *basis* to which reference has already been made. These *hatas* are extremely densely populated and consist of houses which are little better than hovels. The houses are structures of a very primitive and insanitary type being built mostly with mud walls. It is not uncommon for the floor to be 2½ feet below the surrounding ground level, as it appears to have been the practice to dig out earth to build the walls. The roof is of a flimsy type consisting of either a thatch or *kachcha* tiles on split bamboos. There is no provision for drainage, ventilation or sanitation of any description. During the rainy season these *hatas* are a quagmire of mud and it is not unusual for many of the huts to have a good deal of water in them. About 50 per cent. of the houses

\* Not printed.

in *hatas* have only one room occupying 120 square feet area. Some of the *hatas* are served by lanes which vary from 3 to 10 feet in width and the houses are invariably in a state of great dis-repair. The land nearly always belongs to a landlord who either builds and rents the houses or leases the land on a monthly rental in which case the tenant himself builds and maintains the house. It is estimated that about 10 per cent. of the houses in the *hatas* belong to workers themselves. There are few cases in which both land and house belong to the worker. In certain areas the land (*Nazul*) belongs to Government who have entrusted its administration to the Municipal Board. Recently the Municipal Board have improved certain *Nazul* areas by brick-surfacing the lanes and making *pucca* open drains but such instances are very few indeed. An examination was recently made of these *hatas* and as a result of this enquiry, it has been found that there are in the City of Cawnpore at least 166 *hatas* which are either unfit for human habitation or are in very great need of improvement. A statement showing these *hatas* and giving their description is contained in Appendix II.\*

In September of this year a census was taken of the population in 27 *hatas* together with the *bastis* known as Gwaltoli and Khalasi Lines. The total number of houses occupied in this area was found to be 5,031 and the population 19,260 or nearly 4 persons per house. The percentage of mill workers and their dependants living in these houses is 55½ and that of casual workers 19½. The following figures relate to persons carrying on other trades and professions who are living in these areas:—*ekha, tonga* and *thela* drivers 3½ per cent.; shopkeepers 8½ per cent.; sweepers 3½ per cent.; miscellaneous callings 9½ per cent.; cultivators ½ per cent.

Out of the 5,031 houses 2,783 are occupied by workmen. 84½ per cent. of the houses occupied by the workmen are on rent whilst 12½ per cent. of the houses belong to the workers themselves and are built on land for which the tenants pay a monthly rental. Only 3 per cent. of the houses occupied by the workers stand on land which belongs to the worker himself.

*Rents paid in the city.*—The following figures of rents paid by the inhabitants of these *hatas* are not without interest:—

## A.

Description of Quarters.	Rent of Quarters.			Rent of Land.		
	Colonelgunj.	Birhana.	Pech Bagh.	Colonelgunj.	Birhana.	Pech Bagh.
1. Single room, mud walls tiled roof, approx. area, 16 to 22 sq. yds.	—	1/8 to 2/-	1/- to 2/-	—	-2/- to -6/-	-8/- to 1/-
2. Single room and verandah or 2 rooms, pucca or mud walls, tiled roof, approx. area 22 to 50 sq. yds.	1/8 to 2/-	1/12 to 4/-	1/8 to 4/-	-12/-	(land belongs to the owner and hence no rent)	1/- to 2/-
3. Single room verandah and courtyard, pucca or mud walls, country tiled or flat roof, approx. area 30 to 100 sq. yds.	2/8 to 3/-	6/- to 8/-	5/- to 7/-	2/8/-	Do.	(land belongs to the owner and hence no rent.)
4. Double rooms with verandah courtyard, latrine, outside sitting room and store rooms, katcha pucca walls and flat roof with wooden beams, etc.	8/- to 10/-	—	—	(land belongs to the owner and hence no rent.)	—	—
5. Sweepers quarters built by themselves approx. area 14 to 22 sq. yds.	—	—	—	—	—	-4/- to -8/-

*Health of the inhabitants of the city.*—The following mortality figures afford an interesting comparison:—

Cawnpore Municipality	..	..	..	47 per mille
Whole Province	..	..	..	25 " "
Rural areas of Province	..	..	..	24 " "
Urban areas	..	..	..	37 " "
MacRobertganj Workmen's Settlement	..	..	..	34 " "
Lucknow	..	..	..	40 " "
Agra	..	..	..	43 " "
Allahabad	..	..	..	31.5 " "

It will be seen that the mortality in the MacRobertganj Settlement is much lower than that in the Cawnpore City as a whole. In most of the localities where labour is concentrated, the mortality is very much higher than that represented by the average

for Cawnpore. In some areas the mortality among the factory population is as great as 90 and 100 per mille. The beneficial effect of sanitary dwellings can be gauged by comparing the mortality figure of settlements like MacRobertganj with the figures applicable to labour population living in the city areas. The mortality of other sections of the population living in the city is not nearly so high as that of the labour population.

Cawnpore is notorious for its infantile mortality which is the highest of any town in India. Taking the average of 8 years (1921-1928) Cawnpore showed a birth rate of 37·53 against which the infantile mortality rate was 452. The corresponding figures for MacRobertganj are as follows :—

Birth rate	..	..	..	..	..	35·7
Infantile mortality rate	..	..	..	..	..	393

The high infantile mortality of Cawnpore may be ascribed in a very large measure to the extremely insanitary surroundings in which the parents live. The infants are exposed from the time of their birth to infection of almost every conceivable description and only such infants as acquire immunity from disease can survive. The prevalence of tuberculosis amongst mill workers, specially their women-folk is well known and this factor would also contribute to the high death rate of infants. There can be no doubt that no great improvement in the health of the mill workers and their dependents can be effected unless the question of housing them in healthy surroundings is solved.

*Workers' settlements provided by employers.*—As already stated the average daily number of workers employed by different mills is 32,274. The total number of houses that have been provided by employers is 3,107 made up of 2,593 single quarters, 453 double quarters and 61 larger quarters. The total number of persons housed in these quarters is 9,659 inclusive of the workman and his dependants. Taking the average figure of 3 persons per house, it would appear that 3,220 workmen are at present living in houses built by the mills, leaving 29,000 workers who have no housing accommodation provided for them by their employers. Thus nine-tenths of the labour employed in the mills has to find living accommodation in the city.

There are not many concerns in Cawnpore which provide dwellings for their workmen. Eliminating those concerns which provide dwellings for their watch and ward staff only or for negligible numbers of special classes of workers, the following concerns have built quarters for workmen :—

Name of concerns.	Number of persons housed.
Cawnpore Woollen Mills (MacRobertganj) (branch of B.I.C.)	2,702
Cooper Allen & Co. (Allengunj) (branch of B.I.C.)	3,160
Cawnpore Cotton Mills & Kakomi Factory (branch of B.I.C.)	1,229
Elgin Mills (Begg Sutherland & Co.)	345
Cawnpore Sugar Works (Begg Sutherland & Co.)	308
Union Indian Sugar Works	401
Total	8,154
Add number of persons housed by other concerns in Cawnpore roughly (including peons and watch and ward staff).	1,505
Grand Total	9,659

*MacRobertganj.*—The best workmen's settlement built by the employers in Cawnpore is that known as MacRobertganj which houses mainly the workers employed in the Cawnpore Woollen Mills.

It has 676 single quarters and 140 double quarters and 12 bungalow cottages, built on an open site covering about 26 acres.

The eastern side is laid out in blocks connected by streets and cross-streets, which have been made into shady avenues, which the people find specially pleasant during the hot season.

On the western side the blocks and bungalows are laid out somewhat irregularly to conform with the nature of the land. Many open spaces have been left, and there is an open central square with gardens, also playgrounds and recreation fields.

There are 43 blocks besides the bungalows and various scattered buildings. In general these blocks follow somewhat the *mohalla* plan—a little group of buildings around a large open stone-paved courtyard with a central water supply, *chabutra* and shade tree.

The drainage of each block leads off into the general drainage and sewerage system. The double quarters have private latrines in the private courtyard at the rear of each quarter, and these are well cared for by a large conservancy staff provided



by the company. The public latrines are water flushed and connected with the municipal sewerage mains. Filtered water and outside lighting is supplied by the municipality.

Water for flushing drains and latrines and for irrigating the gardens and grounds is furnished by an electric pump installed by the company.

Some of the blocks are "double quarter" blocks and some "single quarter" blocks. The general design of the block is the same, but in the "single quarter" block there are two lines of 10 quarters each facing other, across the wide courtyard. At each end of the courtyard there two quarters which partly enclose the courtyard. Each of these quarters has a wide covered verandah and a room 12 ft.  $\times$  10 ft., with ceiling averaging a little over 10 feet high.

All floors are pucca.

In a "double quarter" block, private courtyards are added at the back and two single quarters are connected by doorways, so that each double quarter has twice the verandah space and twice the room space plus a courtyard with about 300 sq. ft. of space.

The "single quarter" blocks have 24 single quarters, while the "double quarter" block has 10 double quarters and four single quarters, the first providing for 24 families, and the second for 14 families.

Single quarters rent for Rs. 1-2 annas per mensem and double quarters for Rs. 5-10 annas per mensem and bungalows for Rs. 17 per mensem.

There is an excellent boys' school and also a girls' school, each with playgrounds adjoining. There are dispensaries for men and for women, and a building for maternity and child welfare work. There are clubrooms, and six covered wrestling pits, a large community hall, a segregation hospital, a home for widows, a central office, shops, woodyards and a butcher's shop. In fact, every provision is made for a self-contained and happy village life.

Population fluctuates a little, but averages about 2,700 persons—workmen and their dependents and a fair number of clerks, etc., of superior staff, who mingle and work together happily in the many recreational clubs and activities.

The members of the clubs pay some monthly fees and the clubs receive grants-in-aid from the company. Many tournaments, fetes, dramas, and other social activities are carried on by the residents of the settlement. In the tournaments the MacRobertganj teams win their full share of trophies.

Communal tension has been very slight and indeed the appreciation of this happy life in the settlement is attested by the fact that more people apply for houses there than can be accommodated.

Judicial cases, arbitration and mediation are carried on very effectively and satisfactorily by a *sadar panchayat* composed of three Hindu members, one Mohammadan and one Christian, giving representation to all communities.

The company provides two sergeants, a watch and ward staff, a large conservancy staff, maintenance staff, full medical and educational staff, gardeners and a matron in charge of the home, all under the charge of the welfare superintendent.

The British India Corporation, of which the Cawnpore Woollen Mills Co. is a branch, have recently purchased from the Improvement Trust about 50 acres of additional land for expanding their workmen's settlement. This land is rapidly being put into shape for future buildings, a large stadium has been erected, and near by a full size football field is being prepared.

*Allenganj*.—The above area connects with MacRobertganj on the west and reaches nearly to Allenganj—another large settlement of this Corporation, providing homes for 3,160 persons, and equipped and staffed very much like MacRobertganj. This settlement has 816 single quarters, 74 double quarters and four small cottages.

There are two types of single quarters renting at Rs. 1-2 annas and Rs. 1-10 annas per mensem respectively, and two types of double quarters renting at Rs. 3-4 annas and Rs. 4 per mensem respectively, and four cottages renting at Rs. 12 per mensem.

This settlement also has a community hall, dispensaries, maternity and child welfare centre, boys' school, girls' school, club rooms, office building and recreation and playgrounds, two large open squares and gardens. There are several organised clubs and a *sadar panchayat* composed as in MacRobertganj and performing the same functions. The Company provides two sergeants and a staff which is almost the exact duplicate of the MacRobertganj staff.

*Kakomiganj*.—Kakomiganj, another settlement of the British India Corporation at Juhi has a total of 325 quarters housing over 900 persons—workmen and their dependants.

In Kakomiganj single quarters rent at Rs. 2 per mensem and double quarters at Rs. 4 per mensem.

Conservancy, watch and ward, water and lighting, maintenance staff and management are all provided by the Company who are planning a complete welfare programme similar to that carried on in their other settlements.

The British India Corporation have in all provided 2,254 quarters in which over 8,000 persons workmen, and their dependants, as also a fair number of clerks, etc., are living.

It is understood that the return on capital outlay on these dwellings does not exceed 2 per cent. The Trust has gone fully into the question of costs of workmen's dwellings and a note on this matter by Mr. A. Roland Price, Chief Engineer to the Trust, which is attached as Appendix III will be read with interest. It will be seen that on to-day's prices an up-to-date settlement will not yield a return of more than 2½ per cent.—this return does not take into consideration expenditure on welfare work, e.g., provision of schools, dispensaries, amenities for recreation, etc., nor does it include any provision for conservancy, watch and ward and supervision.

*Examination of the question of Proper Housing of Workmen.*—The Indian Industrial Commission under the chairmanship of Sir Thomas Holland took up the question of the proper housing of industrial classes and it made the following recommendations :—

(1) Government should use its power to acquire land on behalf of employers for the housing of labour, subject to certain safeguards ; (2) land might also be acquired at the cost of Government or local authorities concerned, which they might lease at easy rates to employers for erecting industrial dwellings ; (3) local authorities should be responsible for the development and lay-out of industrial areas on suitable lines, and for securing the maintenance of proper sanitary conditions in such areas ; (4) it would be undesirable and unjust to compel individual employers to house their own labour.

The attitude of Cawnpore employers towards the question of the housing of their labour has been uniformly sympathetic.

A special meeting of a Committee consisting of the representatives of the two Chambers of Commerce, the Municipal Board and the Improvement Trust in Cawnpore was held on the 10th of January, 1921.

This Committee recognised the great urgency of the problem of housing industrial labour in Cawnpore. It was agreed that the cost of providing dwellings for labour ought not to be laid solely upon the individual employer. It was realised that there are a considerable number of employers who would be prepared to enter into a scheme for building their own houses, with financial assistance, on the hire purchase system ; and it was resolved that the Trust should elaborate a scheme of this sort and submit it to the Committee for discussion. It was, however, felt that the number of persons likely to take advantage of such a scheme would be so small that only the fringe of the subject could be touched.

Reference was made to certain new buildings put up by the Elgin Mills to house their labour, and rough figures were laid before the Committee as to cost and rent ; and from these it appeared that the demand for sanitary and properly constructed dwellings was probably greater than had been realised, and that labour was prepared to pay something approaching an economic rent yielding 4 per cent. on total outlay. It was generally considered that a full economic rent would not be obtainable except in a few cases, and it was agreed that the local bodies, i.e., the Municipal Board and the Improvement Trust and the employer might reasonably be expected to recognise their moral responsibility in the matter, and to shoulder each his own share, of the financial burden. It was suggested that the Municipal Board deal lightly with industrial settlement in the matter of taxation, with special reference to the fact that such settlement would demand smaller services from the Board than do ordinary bazaar dwellings. The Committee stated :—

“ The Improvement Trust should assist by the provision of land at concession rates and of sanitary requirements and water supply. With this assistance the employer should provide accommodation for the bulk of his workers, contenting himself with a lower rate of interest on the capital so employed than he would expect to get if he put the same amount of capital into his business. He would, undoubtedly, reap indirect benefits from this employment of his capital, which it is not possible to state in terms of money.”

With this co-operative effort it was felt that the gulf between the present price of land and building, and the rent which the workman could or would pay, might be bridged ; but at the same time it was recognised that the workman must do his share. Wages had recently been raised to a considerable extent largely on the plea that the workmen were forced to pay increased rents in the bazaar ; and it was agreed that there was no reason why the workmen should not pay at least the same rent in a sanitary settlement as he did in the insanitary quarters which were all that he could at that time find. In this connection it was noted that the rents of the workmen

residing in the settlement of Messrs. Cooper Allen and of the woollen mills, had not been raised, in spite of the increase of their wages; and it was pointed out that the low rate of rent there prevailing was a direct inducement to workmen whom it was desired to attract into new settlements, to refuse to pay a reasonable rent.

It was therefore hoped that the managers of these settlements would take steps to increase their rents as opportunity offered.

The Trust in considering the report of the Committee just referred to, accepted the proposals outlined above and placed on record its considered opinion that no legal liability to house mill hands could or should be enforced by legislation either against the millowners, the Trust or the Municipal Board. It must be admitted that neither the Improvement Trust nor the Municipal Board has so far done anything which would induce employers to put up improved dwellings for workmen. Some years back negotiations were carried on with the Muir Mills and the Victoria Mills for the construction of workmen's dwellings and land was offered at Rs. 7,500 per acre, but even though this very high figure of price was accepted, the negotiations broke down owing to the absence of water supply.

Since then there has been great depression in trade and industry which has disinclined commercial concerns from spending money on developments which are not directly remunerative. The question of water supply has now been solved as the Municipal Board have been able to extend their water works.

The settlements to which reference has been made were built some 30 or 40 years ago at a time when the profits which the employers were making in Cawnpore used to be much higher than to-day and building costs, including the cost of land, were very low.

In January, 1928, a joint committee of the representatives of the Municipal Board, employers of labour, and the Improvement Trust discussed this matter again. It was agreed that the serious congestion and very insanitary condition of houses in which the majority of labour class employed in the mills lived were responsible for the high death rate and infantile mortality in the town. It was considered that suitable quarters for at least 20,000 workmen and their families were required as the provision of a few quarters here and there had not served the object in view; and it was agreed that the problem could only be successfully tackled by co-operation of all the parties concerned, i.e., the millowners, the Improvement Trust and the Municipal Board and that Government aid to finance the scheme by loan was essential.

The scheme suggested was that the Improvement Trust should raise a loan from Government at about 6 per cent. interest to build a number of quarters and of the type as suggested or approved of by the various millowners and such settlements be handed over to them after construction. The millowners would repay the loan by equated instalments in 30 years at the end of which period the settlement comprising quarters for the mill hands would become the property of the millowners. It was further suggested that the cost of providing roads, sewers, and sanitary conveniences should be a charge on the loan money and should be incurred by the Improvement Trust, as a part of the scheme, but the cost of providing street lights and water mains on the roads should be a charge on the Municipal Board, in the same manner as such conveniences are provided for in other areas within the Municipal limits.

The question has just been again examined by the Improvement Trust Enquiry Committee appointed this year by the United Provinces Government, under the chairmanship of Mr. H. S. Crosthwaite, C.I.E., I.C.S. The representatives of the Upper India Chamber of Commerce in giving evidence before this Committee expressed their approval of the scheme already referred to, whereby Government were to provide funds at a low rate of interest; the Trust were to provide land and approved buildings at cost, and the Municipality to provide roads, sewerage, water mains and lighting free, and the factory on whose behalf the expenditure was incurred would repay the amount in payments to be equated over a series of years.

The Crosthwaite Enquiry Committee, which has just submitted its report to Government, has made the following recommendation :—

"The Fremantle Committee suggested that the local authorities should furnish the land and amenities at a concession price and that the buildings should be erected by the commercial companies. We agree that co-operation on these lines is necessary, but we go further and suggest that the companies should be given the additional facility of loans from Government on easy terms of repayment at the rate of interest at which Government can itself borrow. We think that this further offer will be necessary before an adequate response from the commercial community will be forthcoming. Suitable areas for settlements exist already in the *Gutaiya*, Factory Area, Southern City Extension, and *Khalasi Lines III. B* schemes, which are capable of further extension if necessary. We propose that these areas should be made available to the mills on a 90 years' lease on payment of a premium equivalent to

the acquisition cost plus overhead charges, with a nominal yearly rent for the construction of workmen's dwellings, and that Government should lend to the mills, if the mills so desire, the money requisite for the premium and cost of construction and development at a rate of interest approximating to the rate at which Government can itself borrow. The loans should be repaid in equated instalments extending over a period of 30 years. Both lands and buildings will be mortgaged to Government as security for repayment. We have been assured by the Upper India Chamber of Commerce that if Government are willing to lend on the above terms some of the leading mills will build settlements for their workmen in the near future. If the response to this offer is inadequate the sites should be offered to private persons on lease for 90 years, renewable every 30 years at an enhancement not exceeding 50 per cent. on the same conditions as those suggested for the mills, except that the premium should include the cost of such development as may be necessary, that no money be lent by Government, and that the rent to be charged for the quarters should be so calculated as to give a return of not more than 6 per cent. net after allowing for renewals and repairs. An additional condition will be that the houses are to be kept in good repair and that if the lessee fails to do so the Trust can have the repairs carried out at the expense of the lessee or in the alternative cancel the lease. This is in addition to our proposals for housing the poorer classes in paragraph 15. There is also available a triangular area to the west of the Bombay, Baroda and Central India Railway siding which should be offered to private builders on the same terms and conditions. The Committee is unanimously opposed to the alternative of the Trust itself constructing factory workmen's dwellings on the large scale that is required in Cawnpore."

The Committee have also recommended to Government the taking up of certain schemes which include the acquisition and laying out of 27 *hatas*, which would mean the demolition of 2,400 houses and dis-housing 9,351 persons living in them. The reference to paragraph 15 in the above excerpt relates to a further recommendation made by the Committee whereby the Trust is to be given from provincial revenues a compensatory grant of Rs. 50,000 a year to be utilized in helping the dis-housed persons. It has been suggested that these grants should be spent on the provision of brick plinths and brick wall pillars, so constructed as to admit of mud walling being bonded, so as to fill in the spaces between the pillars and thus constitute a suitable structure to carry the roof of a poor class dwelling. These grants would be available also for the purchase of doors, windows and roofing materials, which would be purchased by the Trust in bulk and retailed to de-housed persons at or near cost price, so as to afford them the benefit of the low rates made possible by such bulk purchases. It has further been suggested that assistance for the construction of better type of houses with brick walls should also be made available in the shape of doors, windows and roofing materials at concession rates. The grant would naturally be utilized to help only those persons whose employers are not willing to make arrangements for their housing.

If the scheme recommended by the Committee for the better housing of workers in mills, has the approval of Government and the mills concerned, it would only be necessary for the Trust to provide land at cost price for purposes of that scheme.

The Enquiry Committee have approved of the following new schemes to be taken in hand during the five years commencing on the 1st April, 1930 :—

(1) Pechbagh Dalelpurwa .. .. .	Rs. 5,86,870
(2) Birhana .. .. .	„ 4,14,700
(3) Naya Chowk .. .. .	„ 1,35,300
(4) Moti Mahal .. .. .	„ 69,000
(5) Colonelganj .. .. .	„ 2,55,130
(6) Khalasi Lines III. B .. .. .	„ 1,00,800
(7) Creet's compound .. .. .	„ 1,17,700
(8) Old Cawnpore .. .. .	„ 1,70,500
<b>Total .. .. .</b>	<b>Rs. 18,50,000</b>

Most of the above new schemes deal directly with some of the insanitary *hatas* of the city and their object is to lay out and develop the land so as to provide space for shops, residential quarters and godowns built on approved lines.

The whole question of the housing of industrial workers and of removal of congestion in the city depends on whether the Government are able to provide the necessary funds or not. The schemes have been so formed that quite apart from the loan which the Government would be required to give to the industrial concerns and for which they would receive suitable security and interest, the additional funds necessary during the five years would not exceed Rs. 10,50,000.

It has been proposed that this deficit should be met by the following additional yearly income which the Government has been asked to provide :—

	Rs.	Rs.
Increase in the stamp duty on the transfer of certain properties .. .. .	1,00,000 × 5 =	5,00,000
Municipal contribution .. .. .	42,000 × 5 =	2,10,000
Sale proceeds of special Nazul .. .. .	60,000 × 5 =	3,00,000
Grants for poorer class dwellings .. .. .	50,000 × 5 =	2,50,000
		<hr/> 12,60,000

This leaves a surplus of roughly Rs. 2,00,000, due to the fact that the programme does not take fully into consideration the yearly grant of Rs. 50,000, which has been recommended to cover unremunerative schemes. The Trust would expend this surplus on the objects for which the grant is made.

### APPENDIX III.

Mr. A. ROLAND PRICE, M. INST. M. AND CY. E., CHIEF ENGINEER,  
CAWNPORE IMPROVEMENT TRUST.

#### *Note on the Housing of Workmen in Cawnpore.*

The question of the housing of the working classes has been steadily gathering importance and forcing itself on the attention of the various employers of labour, Government and the Improvement Trust. It is not the simple matter of providing houses, but a knowledge of the type of house to be built with minimum accommodation which can be allotted to each working class family compatible with their convenience and comfort, and at a minimum rent. The wretchedness of the dark and sordid hovels in the city in which four or five or more persons are huddled together has already been described at length in the body of this report, but no written description can fully bring one to realize the dire consequences of an existence in such places.

The percentage of married and single workers living in the city is not known ; according to B.I.C. statistics this can be assumed to be 3 to 1. A single worker requires one room and a verandah, and should be built in a sanitary manner and in airy surroundings. The size of the rooms in the city vary, in some cases they are only 8 ft. by 6 ft., and the projection of the *kutchra* roof forms a small verandah. When a worker is married a very natural attempt is made to provide privacy, even if the courtyard is only hung round with "gunny" bags.

The British India Corporation have stated that the accommodation which they provide in their settlements is sufficient for the needs of their employees. McRobertganj can be considered a model settlement, for the simple reason that all quarters have a good circulation of air round them and are not "back to back," as in the Allenganj Settlement.

For obvious reasons it is cheaper and more economical to build quarters in rows and "back to back," and if cross ventilation could be arranged it would meet the case. The problem is to provide a settlement which will bring an economical return on the capital expended. Building materials can be said to be obtained at reasonable rates. Good second-class bricks are sold at Rs. 13 to Rs. 14 per 1,000. Only inferior timber, such as Nim, Tamarind, and small logs of Shisham is available locally. Sal wood is imported and is suitable for door jambs and roof timbers. Cut sal wood can be obtained at Rs. 3 per cub. ft. Country batten doors can be obtained at 12 annas to Re. 1 per sq. ft. Teak is imported and expensive and usually costs Rs. 5 per cub. ft. A cheap floor can be built of dry brick on edge. This floor is not entirely sanitary but is an improvement on the *katcha* mud floors which are provided in the city. A cheap sanitary floor can be made from 6 in. lime concrete with cement rubbing finish. A satisfactory sanitary flooring can be made with flat bricks over 3 in. lime concrete. For the walling, sun-dried pressed bricks can be used, but it is doubtful if a dry mud wall of this nature can be made permanently waterproof. A substantial walling can be made of good second-class bricks in mud with lime pointed outside. For the roofing, local tiles are usually fixed on cut timber. This type of roofing is cheap but the difficulty is to obtain cross-ventilation if quarters are placed "back to back." It has been suggested that if the roofs are made with semi-circular arches, cross-ventilation can be obtained. This would considerably cheapen the cost of construction.

In order to arrive at an estimate for the cost of building 50 quarters on one acre of land, the following accommodation per quarter has been allowed. One room, 12 ft. by 10 ft., with a 7-ft. verandah in front, and a 12 ft. by 10 ft. courtyard surrounded by a 6-ft. wall. From estimates which have been made the cost of construction varies from Rs. 400 to Rs. 500 per quarter.

Under the United Provinces Municipalities Act, Section 298, municipalities are empowered to make bye-laws, and under this section the Cawnpore Municipality have made building bye-laws which were adopted in 1916, restricting the number of houses in a *hata* to 50 per acre. This bye-law was made to prevent congestion on new sites. In addition to above restriction it is required that one-sixth of the total area must be left open as compound and one-fourth open area included in the house. This means that each family house must not be less than 80.67 sq. yds. in area, of which 20 sq. yds. must be open, leaving 60.5 sq. yds. for building. These bye-laws are for married families, but there are many workmen who come in from their villages leaving their families behind. In another section of the building bye-laws, every room intended for human habitation must have a clear area of not less than 80 sq. ft., and a minimum width of 7 ft.

The following is the estimated cost of building a workmen's settlement, allowing 50 quarters per acre.

*Estimated cost.*

Cost of one acre of land, including developments, i.e., drains, water mains, roads .. .. .	Rs. 6,850
Estimated cost of building 50 quarters, comprising a 12 ft. by 10 ft. room, 7 ft. verandah, and 12 ft. by 10 ft. courtyard, at Rs. 450 each, allowing 50 quarters per acre	22,500
Water flushed latrines, per acre .. .. .	600
	<u>Rs. 29,950</u>

Say Rs. 30,000 or Rs. 600 per quarter.

*Note.*—No provision has been made for boundary walls, fencing or lighting.

*Returns anticipated.*

If Rs. 600 is the capital value of each quarter, then the rent calculation should be :—

Interest on Rs. 600 at 6 per cent. per annum .. .. .	Rs. 36
Maintenance, repairs and depreciation, charged at 2 per cent. per annum .. .. .	12
	<u>Rs. 48</u>

or a monthly rental of Rs. 4.

It is impossible to get Rs. 4 per month for a quarter of this kind. It is doubtful whether more than Rs. 2 would be obtained.

The rent paid by the workmen in the B.I.C. Settlement quarters is as follows :—

Single .. .. .	Rs. 1-2 annas to Rs. 1-12 annas p.m.
Double .. .. .	Rs. 3 to Rs. 5-10 annas p.m.
At a charge of Rs. 2 per month, or .. .. .	Rs. 24 per annum.
Depreciation and repairs at 1½ per cent. per annum	9
Net receipt per annum .. .. .	<u>Rs. 15</u>

there is only a return of 2½ per cent. on the capital.

This estimated return does not take into consideration the cost of welfare work, provision of schools, recreation grounds, etc., or the cost of the conservancy staff.

In the present state of trade, employers are not likely to build for a return of 2½ per cent., and if the building of workmen's settlements is to be encouraged, employers must either be subsidized or else modern amenities, such as roads, water supply, drains, sewerage, lights, etc., should be provided free by either the Trust or the Municipality, and even then the employers must increase the rent if they demand a return of even 5 per cent. on the capital outlay.

From the above it will be seen that the cost of land and development is about Rs. 137 per quarter, and in order to obtain an economic return of, say, 5 per cent., the quarter would have to be built for Rs. 163.

Even if the land was sold at cost and developed at the expense of Government and the quarter rented at Rs. 2, the cost of each quarter should not exceed Rs. 280, for a return of 5 per cent. to the builder. With the present cost of material it is not possible to build on sanitary lines, and give the accommodation needed for such a small sum unless the type of house is the same as at present exists in the city.

## HARNESS AND SADDLERY FACTORY, LABOUR UNION, CAWNPORE.

2. *Recognized Union.*—The Union consists of over 500, who are the labourers of the Government Harness and Saddlery Factory, Cawnpore, except the president of the union, who is an outsider. The factory is owned and managed by the Government of India, Army Department. It employs at present about 1,500 workmen. The union has been recognized by the Government of India.

3. *System of Payment.*—In this factory, except those who are employed as transportation coolies and in store department, almost all the labourers are paid on piece-work system. This system does not ensure any fixed wages.

The payment is made monthly, and only on the manufacture of those goods, which are passed finally by the department. No payment is made on those goods which are rejected.

It might be noted in this connection that the rate at which payment is made for the work done, is also ever changing, depending more or less on the will of the supervising staff. It has nothing to do with the prevailing market rate of any particular commodity.

The Government keeps a highly paid supervising staff in the factory, which swells the overhead charges in the manufacture of goods. This doubly affects the workmen. The Government being unable to manufacture the goods, at the market, or below the market price, on account of its heavy overhead charges, gets its requirements from private manufacturers, and this very often leads to the reduction of labouring staff. Within a period of six months, the number of labourers has been reduced from 2,200 to 1,500 or 1,600; and the orders for the manufacture of goods, which would otherwise have been executed in the factory, have been placed with private firms. It also adversely affects the workmen, as it leads to an attempt that is often made to reduce his rate of payment.

A perusal of the monthly payment of the workmen of the factory will show how little and inadequate their monthly earnings are. The rate of payment of piece-workers and the wages of those, who work on fixed daily rates, should be increased. Their scale of wages has remained stationery for the last 10 years. Most of them are heavily indebted.

The Government should guarantee a minimum living wage for each workman.

4. *Compulsory Leave System.*—In this factory, a system of giving compulsory leave to the workmen is prevalent. If at any time, as is the case at present, there is not sufficient work in the factory, to keep all the workmen employed (some of the shops in the factory are working for only four days in the week), the head of the factory, would not as a rule, proportionately decrease the number of workmen permanently, so that the remaining men may be able to earn a living wage, but he would give them temporary leave. The result is that these workmen live idle, with the hope of getting work in the factory in future. If their services were permanently dispensed with, they might have earned their living elsewhere. Sometimes it happens that a number of workmen go to the factory daily only to be told in the course of the day, that there is no work for them on that day. They are not even given compulsory leave. Some of these workmen have to walk to the factory from long distances. The union respectfully urges that the system of giving compulsory leave, or calling the workmen to the factory, without providing them with sufficient work, should be stopped. The Government maintains it in its selfish interest, as it costs it nothing to keep workmen idle, and it gets the advantage of their skilled services, whenever it needs them, without paying for the period when it could not provide them with any work.

The Government fears that if it were to permanently dispense with the services of skilled workmen, whenever they are not needed, they would in this case take up other work, or migrate to other places, and would not be available to it whenever needed. The Government ought to pay a minimum salary to its workmen for this "off" period. And wages should be paid fortnightly and not on the 7th of each month.

5. *No Housing Arrangement.*—The Government has not made any housing arrangement for its workmen.

A very large percentage of the labour in the factory, is drawn from villages and other places, situated several miles from it. In a large number of cases, labourers have to walk four to eight miles, in going to and coming back from, the factory—which tells heavily upon the vitality of the workmen—already weak on account of insufficient nourishment, not to mention the waste of time involved in this.

Other employers of labour in Cawnpore have provided decent quarters for their workmen.

It can reasonably be expected that Government's treatment of its labour ought to be exemplary to private employers of labour. If it cannot do that, it should at any rate follow their example.

The private dwellings of the workmen, who live in Cawnpore—which is one of the most congested cities of the world, and where house-rent is very high, are very insanitary and unhealthy. They naturally affect the health and efficiency of the labourers.

6. *Want of Medical Arrangements.*—There are no free medical arrangements for the workmen, outside the factory. Other employers of labour in Cawnpore, who have constructed workmen's dwellings, have also made free medical arrangement for their workmen even outside their factories.

Government should also do something in this respect.

7. *No Gratuity or Pension.*—The workmen are neither given any pension, nor any gratuity on retirement. In very rare cases, gratuity of only trifling amount is given out of *Fine Fund*—if available. That hardly meets the situation. They are not given benefits of Provident Fund Rules, as is allowed to the employees of railway and of other bodies, and to a class of other Government servants. The absence of these benefits causes much hardship to the workmen, and there is no reason why they should not be allowed its benefits.

8. *Welfare Work.*—Educational facilities are allowed to the children of workmen only in the factory on payment of 8 annas per month, per boy.

This facility can be available of, only by those workmen, who live not very far from the factory.

This levy of 8 annas per boy should be done away with.

Workmen have to attend the factory from 7 a.m. to 3.45 p.m., with an interval of 1 hour from 11 a.m. A very large percentage of workmen, who live at a distance from the factory cannot leave the factory (nor are they at present allowed to leave the factory) during the interval, for taking their bath and meals, etc.

Proper arrangements should be made in the factory for the same by providing separate sheds for bathing and for taking food. Better arrangements should be made for providing cold drinking water to all workmen, during hot season.

#### CERTAIN MILLHANDS OF CAWNPORE.

##### *A few of our grievances and requirements.*

1. We are not granted leave when we require it of necessity. Our names are struck off from the factory if we are absent for four days, and the wages due to us are forfeited.

2. Our pay is very low and is not sufficient to support us.

3. We work in the mills from childhood on to old age, but whenever any of us are unfit for work we are turned out of employment without any consideration whatever.

4. We should be given some share from the profits of the company.

5. We should be allowed one month's leave with pay after one year's service.

6. Our residential quarters are bad and too small for our requirements. The millowners should provide quarters for us at low rents.

7. Women workers should be given one month's leave with pay before the time of confinement, as is the practice in Bombay, where leave is granted for six weeks with an allowance of 8 annas a day.

8. A lady doctor should be appointed by Government to look after the health of women workers.

9. Some legislation should be enacted to enforce fortnightly payments of wages; the payments being made within four days of their becoming due.



Mr. A. P. DUBE, B.C.L., BARRISTER-AT-LAW, PRESIDENT, PRESS  
EMPLOYEES UNION, ALLAHABAD.

To show the monthly earnings of salaried hands a statement is given below.  
Figures are stated as they stand in the month of August, 1929 :—

Rs. a.				Rs. a.			
8 men at	..	..	6 0 each.	2 men at	..	..	32 0 each.
8 "	..	..	7 0 "	29 "	..	..	35 0 "
43 "	..	..	8 0 "	3 "	..	..	37 0 "
44 "	..	..	9 0 "	1 man at	..	..	38 0 "
4 "	..	..	10 0 "	1 "	..	..	39 0 "
31 "	..	..	10 8 "	10 men at	..	..	40 0 "
1 man at	..	..	11 0 "	16 "	..	..	45 0 "
93 men at	..	..	12 0 "	1 man at	..	..	49 0 "
139 "	..	..	13 0 "	3 men at	..	..	50 0 "
16 "	..	..	14 0 "	3 "	..	..	60 0 "
11 "	..	..	15 0 "	5 "	..	..	65 0 "
16 "	..	..	16 0 "	2 "	..	..	68 0 "
8 "	..	..	17 0 "	2 "	..	..	70 0 "
16 "	..	..	18 0 "	2 "	..	..	74 0 "
5 "	..	..	19 0 "	6 "	..	..	75 0 "
24 "	..	..	20 0 "	3 "	..	..	90 0 "
1 man at	..	..	21 0 "	1 man at	..	..	98 0 "
22 men at	..	..	22 0 "	1 "	..	..	100 0 "
2 "	..	..	23 0 "	1 "	..	..	116 0 "
3 "	..	..	24 0 "	1 "	..	..	122 0 "
22 "	..	..	25 0 "	6 men at	..	..	140 0 "
6 "	..	..	26 0 "	1 man at	..	..	180 0 "
2 "	..	..	27 0 "	1 "	..	..	200 0 "
17 "	..	..	28 0 "	1 "	..	..	240 0 "
20 "	..	..	30 0 "				
Total .. 664							

Average earnings of piece and contract hands are in the neighbourhood of the following figures :—

*Composing.*

Rs.				Rs.			
2 men, grade I at	..	..	50-55	43 men, grade VI at	..	..	25-30
3 " II at	..	..	45-50	25 " VII at	..	..	20-25
10 " III at	..	..	40-45	8 " VIII at	..	..	15-20
18 " IV at	..	..	35-40	1 man grade IX at	..	..	10-15
31 " V at	..	..	30-35				
Total .. 141							

*For year 1928.*

*Bindery—Piece-workers.*

Rs.				Rs.			
7 men at	..	..	24 each.	1 man at	..	..	5 each.
9 "	..	..	15 "	1 "	..	..	12 "
2 "	..	..	19 "	1 "	..	..	13 "
1 man at	..	..	14 "	1 "	..	..	8 "
1 "	..	..	7 "	1 "	..	..	4 "
5 men at	..	..	9 "				
Total .. 30							

*Contract system (Press-room and Litho).*

Rs.				Rs.			
24 men at	..	..	12 each.	1 man at	..	..	24 each.
34 "	..	..	13 "	4 men at	..	..	25 "
1 man at	..	..	14 "	1 man at	..	..	27 "
3 men at	..	..	15 "	1 "	..	..	28 "
2 "	..	..	16 "	3 men at	..	..	30 "
7 "	..	..	17 "	1 man at	..	..	32 "
3 "	..	..	18 "	4 men at	..	..	35 "
3 "	..	..	19 "	3 "	..	..	45 "
7 "	..	..	20 "	1 man at	..	..	50 "
7 "	..	..	22 "				
Total .. 110							

The prices have gone up in this country as in others. The table of wages given above is sufficient to show how badly are the lower classes of press hands treated by the Government of the Provinces. It passes comprehension how can a man live on a wage of Rs. 6 or Rs. 10 a month, especially if he happens to have a family, as in majority of cases he is bound to have. It would be an astonishing thing in a private individual if he appropriated the fruits of labour of human beings, and underpaid them badly and yet did not entertain the slightest misgiving about the elevation of his private character, or the purity of his private atmosphere. But what hope can there be for the removal of the coarse depravity of the garret and the slum, if the Government of the Province does not set an example befitting a gentleman in a department in which it is an employer? If a Government of a big province with all its resources is incapable of recognizing this simple fact, what hope could be entertained from a private employer? These figures are sufficient to show that a legal minimum wage must be fixed by law and strictly enforced.

A real hardship is generally caused by the fact that piece-workers are not paid for the time during which they remain idle in the Press for want of work. Though after repeated memorials the superintendent has very recently commenced paying for "no work," the measure adopted is up till now half-hearted, inasmuch as the privilege is granted casually according to the pleasure of the superintendent, and men are paid half the wages only, whereas the Government of India pay in full in similar circumstances. A quotation is made below from a circular of the Government of India in this connection " (10) piece-workers have represented that a real hardship has been caused by the fact that they receive no payment for any time during which they remain idle in the Press for lack of work. To remove this grievance it has been decided that in future they will be paid according to their class rates, if during normal working hours they have to remain idle for this cause."

*Overtime.*—Extra hours are worked when urgency demands it, and are known as "overtime." For evaluation, which means for the computation of wages for the "overtime" put in, 8 hours count as a day for lino-mono operators, engine room and machine room assistants, while 7 hours count as a day for the rest, except readers and copyholders for whom 6 hours count for a day.

Now it is clear from the preceding paragraphs that the usual working day consists of 6½ hours in the Government Press, for nearly 940 men out of a total of 962. But when the Government comes to assess the wages of "overtime" done by a worker it computes it on a basis of 7 hours a day. In other words for a calculation of "overtime," a day is taken to be half an hour longer. That is to say again, what a worker earns in 6½ hours while he is fresh, he has to earn it in 7 hours after he has become tired and jaded by 6½ hours hard work already put in during the course of the day. It does not require much argument to show that extra work put in after a day's hard work is exceedingly more taxing to the powers of the worker than the day's work, yet the local Government calculates the wages exactly on the pay or the average wages that the man gets for a regular day's work, neither more nor less. This is in direct contradiction to the rule prevailing with the Government of India Press, which adds 25 per cent. to 50 per cent. to the man's pay or average wage and then calculates the amount of "over work." This shows a rational recognition of the fact that for "over work" a man is working 25 per cent. to 50 per cent. harder and must be paid accordingly. The simple idea of fair play has left the local Government unaffected although the Resolution No. A-31 of the Board of Industries administration, dated the 15th July, 1920, was published in the United Provinces Gazette, dated 17th August, 1920.

"Overtime" is a normal feature of labour in the Government Press, well-known to the employees who do the labour and the Government which employs them, yet this overtime work is utilized to cause a hardship to the overtime worker. It does not count for the purpose of leave, salary or pension. A clerk who does no overtime work is entitled to get casual leave. But an overtime worker who has probably impaired his health in the overwork, does not get it, because he is an overtime worker. This additional work does not get additional leave and does not count as regards pay on the leave days.

*Rule 19.*—Of Resolution No. 31-A of the Boards of Industries and Munitions, dated Simla, 15th July, 1920, republished in the "United Provinces Gazette," dated the 7th August, 1920 says:—

19. "Salaried hands to earn overtime will, in future, be eligible for casual leave."

In fact the workers of the United Provinces Government Press would welcome an increase in working hours to 8 hours a day as in the Government of India Press, and would also welcome all the rules and rates of pay and wages that are applicable there.

*Leave.*—In connection with leave the following provisions at present exist :—

(i) Casual leave with pay is not granted to employees, whether permanent or temporary, who are eligible to earn unlimited overtime allowances.

(ii) Employees on the temporary salaried establishment are not entitled to leave with pay.

(iii) Piece-workers are not eligible for leave with pay except in case of an accident inside the Press.

(iv) Employees absent without leave are fined three days' pay for each day they are absent and piece-workers one day for each day they are absent.

To add to the injustice of the rules stated in rule 22 they are worked in a very unsatisfactory manner by the superintendent. A man who under the rules has earned his leave on full pay is granted leave on half pay and even without pay, as will immediately hereinafter appear.

Out of 962 men, 221 only are permanent, while the remaining 741 hold temporary appointments. Figures are simply staggering. One wonders whether the Government intend to abolish the Press in near future, and this is why they have manned it with temporary hands. If, however, the Press is to be retained as a permanent institution, it passes all comprehension why the figures representing permanent and temporary employees should not at least be reversed if temporary employment is not altogether done away with.

Another grievance of these people is that while employees in other offices of the Government in Allahabad are enjoying holidays of 40 to 50 days, employees in the Press cannot get more than 24 days in a year. It is understood that the Government of India grants 38 days for their Press labourers.

*Pension.*—As a rule the permanent establishment is only eligible for pension. More than 77 per cent. of the establishment being temporary, Government very deliberately evade their responsibility in this respect. How else can their indifference be explained in this matter? Are they not giving pensions to thousands in other departments?

The Government of the United Provinces should either adopt the course followed by the Government of India, or make the temporary establishment permanent and therefore pensionable. The employees of the Press are anxiously looking out for such a consummation.

Constitution of a provident fund is another desideratum of the poor lot of men working in the Allahabad Government Press. A provident fund, is created out of the earnings of a man to provide for his children and old age. To this the Government add a small interest on account of the money being deposited with them. So the Government should start a provident fund scheme for the employees of the Press. Considering the hard lot and poor earnings of the Press employees, the Government of India have removed these disadvantages as long ago as July, 1920. An extract from their Board of Industries and Munitions No. A-31, dated the 15th July, 1920, is :—

"A large number of men who are now employed on a temporary basis will become eligible for pension privileges, and will be allowed to count their past continuous temporary service.

"For all future employees the Government of India Presses Provident Fund will be instituted on the lines of the State Railway Provident Fund."

*Dispensary, Hot Weather Arrangements and Dining Room.*—It will not be out of place if a few more grievances of the Press employees are submitted before the Commission. First and foremost is the want of a dispensary. In employing a very large number of labourers on low wages the Government should look after the medical needs of the men. Secondly, want of fans, Khas tattis in all doors and windows, during the summer season. Extremely hot climate of Allahabad produces a devitalizing effect on the nerves of the men specially on account of the huge congregation in congested rooms. Thirdly, there is no dining room though there are recess hours for taking meals while employed in the Press.

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Mr. BABU LAL, KHURJA (THE U.P.).

The nature of my firm's business consists in the working of cotton ginning and pressing factories in the districts of Bulandshahr and Aligarh. The firm has been carrying on such business for the last 20 years. It turns out about 15,000 cotton

bales annually. The working season at these factories is from the beginning of October to the end of March. About 600 hands are employed. The proportion of men equals that of women and there are practically no juveniles. With the exception of some, the workers generally belong to the lowest grade, women earning 4 annas and men 8 annas a day.

1 and 2. There is no migration in the sense it takes place in large industrial centres like Bombay, where the labour has mostly been imported. Here in the country outside large industrial centres, there is not a scarcity of labour, and we are able to recruit our supply of labour almost wholly at places at which our factories are situated. Still there are about 20 per cent. of labourers who find it profitable to migrate to the towns during the factory season from the villages. They are agricultural labourers, who at the harvesting time from March are able to get and earn decent wages in the villages itself. During the cold weather of the cotton season they find it attractive to work at cotton factories. Such labourers come from and return to the villages every day.

3. Recruitment takes place by sending summons to the labourers through peons. No public employment agencies exist. It is not desirable to establish such in the country side.

7. In these parts, unemployment whenever it occurs is the immediate result of a full or partial failure of crops. Whenever the crops are less there is less work at the factories and also in other occupations in the town. Unemployment insurance may be tried as a remedy against unemployment distress.

57 and 58. No complaints have been received from workers with regard to 60 hours' restriction. On the contrary, they would be very willing to work more provided they could get proportionately higher wages. On the other hand the cotton ginning industry suffers from this 60 hours' restriction. It so happens that huge stocks of kappas get accumulated at times when the cotton season is at its climax in December and January, and such kappas get badly damaged by the winter rains. It is difficult to arrange to work double shifts or overtime as only males can work during night. The ginning and pressing factories work during cold season only, and it may be considered whether the weekly working limit may not be increased to 72 hours a week. Cold season is very healthy in these parts and there is little chance of the workers' health being affected.

96. The rates of wages prevalent in these parts generally for a 10-hour working day are : (i) 4 annas for a woman and 8 to 10 annas for a man : (ii) in agricultural areas, wages are a little higher for harvesting, weeding, etc., and are paid in kind.

97. Before the war, wages were 2 annas 6 pies for a woman and 6 annas for a man. During war time they rose to 5 annas and 12 annas respectively. After the war they declined and are at present 4 annas for a woman and 8 annas for a man. The rise during war time was in relation to the general rise in prices of commodities. In these parts, prices of foodstuffs affect wages the most. The workmen were better off with pre-war wages than post-war wages.

102. Overtime or Sunday work is paid at the same rate as work on ordinary days.

105. Wages differ from place to place with the locality. Any statutory regulation fixing the minimum will, therefore, be difficult. Moreover, such legislation may lead to abuses. It may become a source of friction between the employers and the employed. It is not, therefore, advisable to fix any statutory minimum wage.

## THE SUPERINTENDENT OF MANUFACTURE, CLOTHING FACTORY, SHAHJAHANPORE.

The function of the Army Clothing Factory, Shahjahanpore, is to manufacture garments required by British and Indian troops and followers.

### I.—Recruitment.

1. The labour with which this factory is chiefly concerned is naturally of the tailoring class, for apart from the few artificers employed in the power house and in connection with the maintenance of machinery and plant, the only other labour employed is casual labour for the lower grades of work, such as coolies.

In respect to tailors, the origin of our labour is confined more or less to the United Provinces and particularly to the districts in close proximity to Shah-jahanpur city (chief of which are Shahjahanpur, Bareilly and Lucknow districts) and tailors recruited from the Punjab.

The necessity for recruitment in the Punjab was more pronounced a few years ago, as it was then essential to recruit in the Punjab for the higher grades of craftsmen who were then only available locally to a very small extent.

(i) In the early days of the development of this factory the labour was of a very migratory character, but of recent years our labour force has been as stable as the load of the factory will permit it to be.

(iii) As recorded above our labour force is now more or less stable. The main reasons for this perhaps are the following:—(a) The abolition of the former group or gang system of employment and the introduction of the individual piece-worker system; (b) improvements in housing accommodation schemes as well as the consideration given to welfare measures; (c) the training of our operatives, which has enabled them to increase their individual earnings; (d) a better understanding between management and labour.

2. In the early days of this factory many village tailors were employed for the manufacture of the inferior class of work and for which a very low rate of wage was paid, but the factory, during seasons when labour was in demand in villages for purposes of attending to crops, etc., experienced a sudden migration which to a large degree upset orderly production.

Remedial measures were taken in the direction of putting the basic factor of our making rates on an equality with the market rate for labour, and, therefore, demands for labour in villages are not now felt to any great extent.

3. In the past, recruitment necessitated the despatch of recruiting parties to the Punjab and outside districts of the United Provinces. Unfortunately this had to be resorted to frequently and without prior warning, owing to sudden demands being placed on the factory.

The success of these recruiting parties was, however, seriously affected through the fact that when demands were reduced the factory was forced to discharge a large number of its employees, who naturally went back to their own provinces or districts and there advertised the fact that employment was not constant.

These difficulties are now no longer felt as the policy respecting the placing of manufacture demands improvements in respect of both the provision of supplies and in "planning" have enabled the executive to employ only that labour force which is required for its known or anticipated load.

(i) Best results with regard to the recruitment of tailors is achieved through the tailors themselves and via the medium of our labour bureau; for when additional tailors are required, this information is circulated by our labour bureau and is placed on the factory notice board and at the factory gate.

Our tailors recruited from outside districts are also given stamped postcards to enable them to advertise our needs in their home towns and villages. The result is that any want of the factory is speedily filled. In fact, it is not unusual to find a score of tailors looking for one vacancy.

7. Owing to the abnormal conditions now existing there is at the moment a good deal of unemployment amongst our tailors locally. This is due to the large number of tailors discharged during the past six months or so and to economic conditions locally. There is, however, a slight improvement in respect of the latter and it is hoped that with the approach of the cold weather our unemployed tailors will obtain other work.

(i) As recorded above, the extent of our unemployment is due entirely to reduction in manufacture demands. The extent of this can be visualized when it is known that in February, 1927, the factory employed over 1,400 tailors and boys, and a year later approximately 1,000 tailors were employed, yet to-day there are only approximately 500 tailors.

The factory has naturally taken full advantage of this opportunity in respect of retaining the cream of its labour force, in regard to both character and technical qualifications, and, therefore, the majority of our unemployed tailors are more or less operators of a poorer class or those known by us as "fourth class tailors."

8. *Labour Turnover.*—(i) A few of our tailors have been here since this factory was first opened (as a temporary experimental measure) in 1914. Many others

have been more or less constantly employed since 1921 when this factory began to be developed and organized as a permanent factory. Of the remainder now employed, roughly three years might be accepted as the average duration of employment.

(iii) Absenteeism is discouraged because of the principles of the "sub-division of labour," which functions in many of our sections.

The average is approximately 3 per cent. among our tailors on piece-work rates and about the same in respect of the rest of our establishment.

## II.—Staff Organization.

13. (i) Relations have been exceptionally good, especially during the past two or three years.

(ii) It is presumed by jobbers is meant petty contractors; if this is so, then the experience of this factory and a few other clothing factories is that the employment of jobbers is not a wise one, as it opens up many channels for abuse and what is more it has been proved that it is neither economical nor is it in the interests of the individual worker.

(iii) As an experimental measure a workmen's committee was organized early in 1927, on the basis of a committee composed of one member representing each 100 men (or part thereof) of each class of employees. These representatives were elected by secret ballot and to the total number of such representatives was added half the number by nomination by the management.

Later, the workmen's committee was modified so as to consist of 16 representatives, to be elected annually and on the lines of the above. Out of this number an executive committee, consisting of four members, was formed and to this executive was added four other members, representing:—(1) The European staff; (2) the Indian subordinate staff; (3) the clerical staff; (4) the temporary establishments; and (5) the supervisor-in-charge of the labour bureau, the last named being the secretary of the joint committee.

The objects of the committee were:—(a) To promote better relations between the management and the worker, and also good fellowship amongst the employees themselves; (b) to act as an advisory committee to the management on all matters pertaining to the welfare of the employees as well as the stability of the factory as a whole.

Unfortunately, the committee lacked a guiding hand with regard to the lines on which it should develop, and instead of shaping into an advisory committee it began to trespass upon questions of administration and policy, and, therefore, the development of its activities was not encouraged pending the sanction of a suitable man to control the activities of our labour bureau and welfare questions generally.

Although the workmen's committee as a recognized institution is more or less dormant, yet the workmen living in our lines have formed a committee of their own, through which source suggestions and ideas are frequently submitted to the executive for consideration.

(iv) The view of this factory is that if labour was properly represented in councils such questions as those of technical education, the training of apprentices, schools for factory employees and trade lads, factory sanitation, lighting and ventilation, would receive much greater consideration from the powers that be, and this would, possibly result in grants-in-aid to the advantage of the operatives themselves, the industrial development of the country and the general good of the State and its finances.

Industrial councils could easily be formed by each factory committee nominating one or more representatives to a district or provincial labour council, which industrial council could from amongst its members nominate one, two or more representatives for the local or provincial assembly. Thus the interests of labour would to a greater degree be safeguarded.

## III.—Housing.

16. (i) and (ii) Government provides free accommodation to members of the managing staff on the permanent establishment, with the exception of officers, who, whenever provided with quarters, pay either the assessed rent or a maximum of 10 per cent. of their pay.

The M.G.O. has also sanctioned a definite policy in respect of a housing accommodation scheme for Indians, and this has developed in this factory to the extent shown below :—

—	No. built.	No. being built this year (1929-30).	No. provisionally approved for 1930-31.
Quarters for senior clerks and supervisors (Type "P").	4	—	2
Quarters for superior artisans and clerks, junior grades (Type "Q").	10	10	5
Quarters for married workmen (Type "R").	100	—	30
Quarters for single workmen* (Type "S").	90	—	10
Quarters for menials (Type "J") ..	—	20	—

\* Each quarter (Type "S") to accommodate two single workmen.

22. *Moral effect on worker of Industrial Housing Conditions.*—Improvements tried and suggested. The workmen's housing scheme has proved a decided boon to not only the workmen, but also to the factory for several reasons. In the first place the worker living in a healthy location and under modern conditions is more contented and is as a result more healthy. Moreover, experience has proved that this has assisted in increasing his earning capacity. In fact, a comparison between the output of workers living in our lines with those living in the city or elsewhere, was recently made over a period of three months, as the result of which it was conclusively proved that while the average earnings of our tailors living in our lines was 3·11 annas per hour, that of those living elsewhere was only 2·25. This large increase is partly due to a superior class of tailors living in our lines, but a comparison between tailors of the same class shows a comparison in favour of the tailors living in our lines to the extent of an increase of over half an anna an hour.

From the factory's point of view the above is a decided asset and an economy ; for the greater the output given by each individual the greater is the reduction in production cost.

Secondly, the factory has a certain amount of control over the employees living in its lines, who are gradually beginning to more and more understand the fact that the executive is ever considering their welfare, both present and future, with the result that "management" and "worker" are understanding each other better, and, therefore, it is not surprising to note that during the last time when there was a temporary cessation of work, it was the tailors in the lines who stood by the management. Moreover, our workmen's lines and their proximity to the factory has greatly reduced absenteeism, especially during the monsoon season.

## VI.—Education.

42. That ordinary elementary education must affect the standard of living and the industrial efficiency of workers is an axiom which can be accepted at once.

The factory is only able to impart education of this kind to a limited degree and through the medium of its factory school.

Endeavours to educate its workpeople, so as to make them understand the "whys and wherefores" of the policies inaugurated and the reasons why the management has advocated such welfare schemes, as better education for our employees and their children, technical instruction for our staff, our apprentice and trade lad schemes are constantly being made.

Generally speaking our employees, as a whole, are beginning to recognize and appreciate the necessity for the above schemes, but we are also trying to take our employees into our confidence by letting them into such secrets as "costs of production," emphasizing to them that it behoves each individual worker to give his maximum, so as to enable the cost of production to be reasonable enough to increase demands and obtain repetition orders.

This closer study of economic questions by representatives of our labour has been a tremendous asset in strengthening or in improving the relationship between the worker and the staff or management.

Further, the necessity for cleanliness and healthy surroundings, as exemplified by the lay-out and condition of our factory buildings, our quarters, and our workmen's lines has impressed the majority of our workers, and I make bold to say that this is helping them in improving their standard of living generally.

Ten years ago the tailors and casual labour of this factory were illiterate, ill-clad and generally speaking unhealthy, whereas the employees of to-day have improved to such a great extent that the comparison is extremely conspicuous ; for the majority of our workpeople are to-day sound in body, of healthy appearance, more intelligent and moreover the majority of them are fairly well dressed.

This I claim is entirely due to the intensive education of our employees by their superiors, as well as by the example placed before them in the shape of men, plans and structures.

Finally, the individual earning capacity of the tailor has increased during this period of 10 years by approximately 100 per cent., partly through a more honest basis of fixing making-rates, and partly through better efficiency as the result of technical instruction; all of which has meant industrial efficiency and helped to improve the standard of living.

### IX.—Hours.

57, 58 and 59. The maximum hours worked in this factory are 46 hours per week. This, however, has only been the case during the last 5 or 6 years, previous to which no restrictions as to number of hours worked were in existence in this factory.

Since the factory made working hours a compulsory maximum of 8 hours per day, the output of the individual as well as the output of the factory as a whole has steadily increased.

The daily limit applied to this factory is in accordance with the Factories Act, i.e., a maximum of 10 hours per day for any one day. This maximum is seldom resorted to, and then overtime is made applicable for the 2 hours over and above the normal 8-hour day.

From an industrial development point of view I am a disciple of that school of thought which contends that the cost of production and the cost of living will decrease with every decrease in the maximum of hours worked, until a limit of 6 hours per day is reached, subject, of course, to this being made compulsory and industry being allowed to utilize its buildings and machinery on the basis of two independent shifts both from the point of staff and labour.

### II.—Wages.

96. The bulk of our labour is tailor labour, which is entirely paid on piece-work rates.

These piece-work rates are based on two factors:—The class of garment and the corresponding class of craftsmen required to make it and, secondly, time.

All garments are classified as first, second, third or fourth class garments, and each class requires a corresponding class of craftsman.

For each class of garment a basic daily rate has been allotted, and piece work rates are fixed on the basis of the time taken to make the particular garment at its class basic day rate.

The day rates fixed for our different classes of garments are as follows:—For a fourth class garment Rs. 0-12-0 for 8 hours work; for a third class garment Rs. 0-15-0 for 8 hours work; for a second class garment Rs. 0-18-0 for 8 hours work; for a first class garment Rs. 0-21-0 for 8 hours work.

Naturally, with piece-work rates fixed by the timing process and on the above basic day rates, the prevailing rate of wage and the average earnings of our tailors must vary in accordance with the class of garment under manufacture, as well as with the load of the factory.

Taking the factory as a whole, the average earnings of our tailor labour would be approximately Rs. 30 per mensem, though a great number of our tailors have earned, under normal conditions, as high as between Rs. 50 and 60 per month on piece-work rates.

The following table gives a comparison of the earnings per operator for the past 3½ years:—

*Statement showing average earnings per tailor per month for the last 3½ years.*

Year	Average attendance of tailors per month.	Average total amount paid to tailors per month during the year.	Average earnings per tailor per month.
			Rs. a. p.
1926-27 .. ..	937	29,146	31 0 0
1927-28 .. ..	1,006	30,584	30 0 0
1928-29 .. ..	790	25,289	32 0 0
1929-30 (5 months)	552	14,878	27 0 0*

\*Low—owing to excessive number of holidays and policy of rationing.



The average earnings of our fourth class tailors, who constitute the larger majority, is possibly not more than Rs. 25 per mensem.

The remainder of our labour, other than the few artificers employed, would come under the category of casual labour or coolies and their average earnings would approximately be Rs. 10 to Rs. 12 per mensem.

Casual labour is employed from As. 6 per day upwards ; increases being given for intelligence, service, usefulness, etc. ; the maximum for ordinary casual labour being 12 annas per day for really first class men.

Special rates are, of course, paid to artificers, mates, issuers, etc., which are from a rupee per day upwards.

The rate paid for casual labour by this factory is slightly higher than the rates in force locally.

There are no other earnings besides those of wages.

110. All permanent and temporary establishments of this factory are entitled to privilege leave to the extent of one-eleventh of their actual service plus casual leave up to the extent of 10 days a year, which latter is at the discretion of the factory authorities.

Employees either on day rates of pay or piece-work rates are not entitled to any leave with pay, under ordinary circumstances ; the exception being made when they have been forced to absent themselves on medical advice on account of some epidemic disease when they are given segregation leave with pay.

(i) The majority of our establishments seldom utilize to the fullest extent, the leave they are entitled to or have earned, but they accumulate this to be utilized towards the end of their service or in the case of sickness.

Tailors and day labour seldom take leave, unless this is necessary owing to indisposition, domestic affairs or urgent private affairs, as the taking of leave means a loss of wages.

(ii) As far as possible, leave taken through illness, when supported by a medical certificate, is given by the factory authorities as casual leave, so that the privilege leave earned by our staff or employees is not effected.

Government, it is understood, is now considering a scheme for granting all labour on the permanent strength of factories, a certain amount of leave on full pay each year. This will be a tremendous boon and assistance to our employees.

111. *Desirability of Fair Wages Clause in Public Contracts.*—Very desirable in every respect, as it is not only in the interests of the worker but also in the interests of the industrial development of the country.

### **XIII.—Industrial Efficiency of Workers.**

112. Prior to the Great War, the efficiency of the tailors employed in the Permanent Army Clothing Factories of Alipore and Madras, reached a very high standard of efficiency, especially with regard to tailoring work which demanded hand-work to any great extent.

During the War period the demand for clothing was so great as to necessitate the opening up of 13 branch factories, as well as numerous contract organizations throughout the country ; and in one month during this period the number of garments manufactured totalled over a million and a half.

This expansion from an output of approximately 40,000 garments per month was far greater than the supervisory staff available could cope with, and at the same time guarantee quality of workmanship, economy and honesty in manufacture, with the result that the quality of workmanship deteriorated to a very low standard and irregularities crept in.

Immediately after the War many difficulties were experienced in respect of improving the quality of workmanship and in reorganizing the various clothing factories which were retained to meet the peace demands of the army.

Of late years organization has steadily improved and the efficiency of the worker has also steadily increased. This factory has now as high a standard of efficiency as there was in pre-war days at Alipore or Madras.

113. Machinists or tailor operators in any of the large factories in England or Scotland, and particularly so in regard to those employed in specialist factories, are more efficient and give a greater and better quality of output than does the Indian operator. On the other hand, I make bold to say that the advancement made in this direction by the Indian tailor and machinist during the last two or three years through the aid of specialization, the sub-division of labour principles,

the technical training of operators and the utilization of specialist machinery is extremely hopeful and I believe the day is not far distant when the quality and quantity of the work produced by the Indian tailor will compare favourably with that of the Britisher.

115. (ii) The working conditions of this factory have been developed on definite lines which were planned and decided upon many years ago. This included the abolition of the previous system of fellowship gangs and its replacement by the individual worker system, since when no radical changes have been made, but the effect of this one change on the industrial efficiency of the worker has been very apparent.

(iii) As recorded elsewhere, health and sanitation are given a very prominent place in this factory's organization and development; for apart from the efficiency of the worker, it is most essential that the sanitary arrangements of the factory should be of a very high standard, and that every precaution should be taken to safeguard the health of our employees, especially against diseases of an epidemic nature. This is essential as otherwise this factory might be a channel for the spreading of disease.

(iv) The effect of our housing schemes on the industrial efficiency of our workers has been somewhat astonishing. In fact, apart from the welfare desire to improve the standard of living and the health of our workers, our housing schemes have been an investment from the point of cost of production.

(v) *Alterations in Methods of Remuneration.*—This has been dealt with before, but it might be worth repeating that the introduction of the individual piece-work system and the abolition of the gang system has helped to increase production and the industrial efficiency of the worker.

(vi) Wages have increased of recent years, but the fact that quality of workmanship and merit are of far greater importance than length of service or seniority for selection has given scope to the ambitious worker, and this has resulted in greater efficiency of the individual and has assisted in increasing wages.

(x) The effect of industrial fatigue on production is not as conspicuous now as it was prior to the closing of the factory for an hour's interval from 12.30 to 1.30 p.m. daily, and since the installation of our fans and cooling system.

116. *Possible Methods of securing increased Efficiency.*—The only recommendations I have to make are summed up in the following :—

(a) Increased efficiency in this factory can only be given when a constant economic load is given to the factory for manufacture; for this will enable the factory to keep the bulk of its labour constant and thus advance the training of the individual worker on specialization lines.

(b) The further development of our educational and vocational training schemes would greatly assist in increasing the efficiency of our labour and staff. This, however, more or less necessitates having an instructional staff, independent of that of management or those required for production purposes.

(c) Before concluding may I take this opportunity to record the fact that in my opinion the sphere of activities of this factory might be extended beyond that of supplying clothing to the army, especially now that its organization and development has reached a high standard of efficiency and it can guarantee economical production.

The arguments against this is that by this policy the factory would be encroaching on private industry; but such at present is not the case, for as far as I am aware there are no organized clothing factories of any size in India, other than the Government factories.

On the other hand, it seems to me that when one finds labour in India available and amenable to training and yet realizes the astounding feature of commercial world records that in India there are no clothing factories, yet the clothing industry in all other countries is an industry of great importance, something ought to be done.

It is my contention that India, by closer co-operation with her mills and by the development of clothing factories will in years to come be able to compete with other countries in this direction and thus materially extend her trade. Therefore, the work now being done in Shahjahanpur, viz., the training of staff, apprentices and labour deserves greater support than it has heretofore received.

If demands placed on the factory were large enough to guarantee an economic load, efficiency of production and the training of the individual could be further advanced.

#### XIV.—Trade Combinations.

122. (i) Questions which affect the industrial development of this factory and yet appear to cause criticism and comment from our employees have usually been made the subject of discussion between the management and representatives of the employees.

(ii) Several successful improvements in production have been brought about through close co-operation between the employees and the management, particularly so was this the case in connection with the introduction of the "sub-division of labour" principles. This policy was in the first place very carefully explained to not only representatives of the tailors but to the tailors employed in the "shirt section," in which it was suggested these principles should be first applied.

Before any definite decision was arrived at a part of the section was put on an experimental test of the change in production procedure, whilst the remainder of the sections continued manufacturing garments on the individual system. The result was conclusive proof that the new system would not only speed up production but also increase the earning capacity of our individual operator.

At first there was a certain amount of uneasiness amongst some of the leading tailors of this section, who preferred the idea of being head men of groups or fellowship gangs to that of being paid by the results of their own handiwork.

When the time was ripe to change over, the management made a definite decision that only such tailors as were willing to undertake the manufacture of shirts on the sub-division labour principles would be entertained.

Volunteers were immediately enlisted to a larger extent than the number required to man the particular section, and the tailors of the shirt section have continued ever since to reap the benefit of the change.

Other sections have since been placed on a similar footing and the development of these principles on scientific lines continues to be the subject of careful research work.

#### XV.—Industrial Disputes.

123. There have only been two factory strikes since 1921, when this factory began to be developed as a permanent organization, viz., one in December, 1921, and the second in March, 1926.

(i) The real cause of the 1921 strike was opposition to the introduction of the factory "works inspection" or examination section, and also against the *replacement of the "Thakedar" or contract system by the gang or fellowship system of a maximum of five workers.*

The strike in 1926 was engineered by a small group of "heads of gangs," and the main cause was opposition to the introduction of the individual payment system and the entire *abolition of the group system.*

Two other minor cases have occurred.

One in January, 1921, when five cutters endeavoured to engineer a strike in the cutting branch as a protest against working till 4 p.m. one Saturday, as against 2 p.m., which extra time was necessitated through urgent demands being received.

The second one was in April, 1921, when 12 artificers of the "power house" absented themselves and refused to work, and also tried to make all the power house staff go on strike as a protest against being searched when passing out of the factory gate.

(ii) and (iii) (a) The affair in January, 1921, when the five cutters endeavoured to engineer a strike, only lasted a day, as immediate action was taken to dismiss the five men and replace them by new men entertained.

(b) The incident of the mechanical staff in April, 1921, when 12 artificers and employees of the power house staff absented themselves and endeavoured to engineer a strike as a protest against being searched at the gate, was speedily settled by the dismissal of the 12 men in question and by their immediate replacement. While some of those of the mechanical staff who stood by the factory were rewarded for their action.

(c) The big strike, which took place on the 20th December, 1921, resulted in all tailors (numbering 376) going on strike as a protest against the *organization of a "Works Inspection Section"* in this factory and the replacement of the "*Thakedar*" system by the fellowship gang system.

The organization of the works inspection section was absolutely essential if quality of workmanship was to be improved and bribery and corruption defeated. It was also necessary in the interest of the workers, as it opened up ways and means for individual instruction.

Very definite proof was obtained in support of the fact that the entire strike was engineered by 10 of these "Thakedars."

In passing, it may be worth recording the fact that some of these "Thakedars" employed, inside the factory but under their own personal control, as many as 50 tailors, and the most surprising fact is that the majority of them were not even tailors or technical men in any shape or form. In other words, they simply financed the gang they controlled and benefited by the work and output of their men to the detriment of the earnings of the individual operator.

On the 7th January, 1922, the factory was visited by a committee of senior officers of the Headquarters Staff, including the Chief Inspector of Clothing and the Deputy Director of Equipment and Ordnance Services, and these officers gave a hearing to 12 representatives of the tailors; as a result of which, notices embodying the decisions arrived at, were posted on the gate and these notices embodied the following factors:—(1) The large group system was to be abolished immediately; (2) no fellowship gang of tailors was to be larger than five; (3) no tailor could be a head groupman or in charge of a group, unless he was a qualified tailor himself, and was reported upon favourably by the management; (4) tailors were to be paid weekly.

It was further advertised on the gate that if through the strike the demands placed on the factory could not be met except by giving out of contracts, that no contract whatsoever would be given out in the United Provinces. This notice was drafted because the rank and file of our tailors were informed at meetings held that they need not worry, for if the factory could not get the necessary number of tailors required to do the work then the work must be given out on contract and they—the "Thakedars"—would re-employ them.

Later, action was taken in respect of the known ringleaders by the refusal to re-entertain them.

(d) On the 24th March, 1926, 810 out of 840 tailors employed in this factory went on strike as a protest against the introduction of the *individual payment system* and the *final abolition of the fellowship gang or group system*.

This strike was entirely engineered by about 20 of the head gangmen and it lasted in all for a period of about two weeks, during which time the original 30 gradually increased to a 100 or so.

Finally, on the 10th April, 1926, 500 tailors presented themselves for employment and were re-entertained, making in all a total of 600.

The extraordinary fact about this strike was that the only tailors who continued working were those who were employed in the "individual" piece-work section, which was then under experimental test.

As a matter of fact, this strike has proved to be a blessing in disguise both to the factory and to labour as a whole, and the opportunity was taken of making the strike a "lock-out" and not allowing any tailors to be re-entertained unless they submitted to the policies advocated by the management.

Since the strike the relationship between the management and labour has steadily increased and no trouble whatsoever has been experienced in respect of misunderstandings or grievances. This may partly be due to the fact that on the 26th March, 1926, a notice was posted on the gate to the effect that it was proposed to inaugurate as soon as possible after the 1st April, 1926, a "factory welfare committee" to assist the administration in the general management of matters that pertain to internal economy and the welfare of the factory employees, and this committee has at times been an asset in the direction of arbitration.

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